September 14, 2015 Exceptional Event, Imperial County

Appendix A - Supplemental

| September 14, 2015          |           | Exceptiona |     | •             | al County Appendix A - Supplemental  |
|-----------------------------|-----------|------------|-----|---------------|--|
| TYPE                        | DATE      | TIN        | ΛE  | AGENCY        | DESCRIPTION  |
| Area Forecast Discussion    | 9/12/2015 | 1835       | MST | NWS Phoenix   | Several Pacific disturbances will move into the region Sunday through Tuesday.   |
| Area Forecast Discussion    | 9/12/2015 | 2050       | MST | NWS Phoenix   | Several Pacific disturbances will move into the region Sunday through Tuesday.   |
| Area Forecast<br>Discussion | 9/12/2015 | 2050       | PDT | NWS San Diego | Moisture from the remnants of former Hurricane Linda is expected to arrive late Monday.  |
| Area Forecast<br>Discussion | 9/13/2015 | 0245       | MST | NWS Phoenix   | Forecasts will become a little tricky these days as several Pacific shortwaves move into the region over a warm air massHave nearly all of Arizona in general thunderstorm potential.  |
| Area Forecast<br>Discussion | 9/13/2015 | 0929       | PDT | NWS San Diego | Increasing onshore surface pressure gradientsA large amount of lower-level moisture from the remnants of Tropical Cyclone Linda will move into the area from Onday through Wednesday. Breezy westerly winds will develop over the mountains and deserts Monday through Wednesdaywith local gusts near 45 mph possible through favored mountain passes and desert slopes. |
| Area Forecast<br>Discussion | 9/13/2015 | 0930       | MST | NWS Phoenix   | Several Pacific disturbances will move into the region Sunday through Tuesdaywith a modest increase in moisture and chances for showers or thunderstorms.  |
| Area Forecast<br>Discussion | 9/13/2015 | 1337       | PDT | NWS San Diego | Increasing onshore surface pressure gradientsA large amount of lower-level moisture from the remnants of Tropical Cyclone Linda will move into the area from Onday through Wednesday. Breezy westerly winds will develop over the mountains and deserts Monday through Wednesdaywith local gusts near 45 mph possible through favored mountain passes and desert slopes. |
| Short Term Forecast         | 9/13/2015 | 1918       | MST | NWS Phoenix   | For southwestern Arozona: Locally reduced visibilities in blowing dust is possible for the next hour or so due to distant thunderstorms. Winds in excess of 30 mph are possible across far southwest Yuma County.  |
| Area Forecast<br>Discussion | 9/13/2015 | 2130       | PDT | NWS San Diego | Isolated thunderstorms over the Santa Rose Mountains and portions of the Coachella Valley. Surface pressure gradients were accelerating onshore to the lower deserts to 5MBS. Locally gusty westerly winds were blowing through the mountains passes into the deserts late today.  |
| Area Forecast Discussion    | 9/14/2015 | 0401       | PDT | NWS San Diego | Moisture from the remnants of former hhurricane Linda will arrive today and linger into early Wednesday.   |
| Area Forecast<br>Discussion | 9/14/2015 | 0453       | MST | NWS Phoenix   | Locally breezy to periodically gusty winds are possible across southeast California and portions of western Arizonawith gusts peaking near 30 mph at times.  |

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| Area Forecast<br>Discussion        | 9/14/2015 | 0915 | PDT   | NWS San Diego | The combination of increased troughing on the west coast and the remnants of ex-Hurricane Linda moisture wil continue to increase the clouds and bring a slight chance of showers. Surface pressure gradients are trending onshorethe stronger onshore flow will result in gusty afternoon winds especially in the mountains and desert locations.                             |
| Urgent Weather<br>Message          | 9/14/2015 | 1248 | PDT   | NWS San Diego | Wind Advisory in the San diego County deserts. Strong and gusty winds in the deserts today. Strengthening onshore flow will create strong and gusty winds in the desert this afternoon and evening. West-northwest winds 20-30 mph with gusts to 50 mph and local gusts to 60 mph. Location along the desert slopes. Visibility less than 1 mile due to blowign dust and sand. |
| Area Forecast Discussion           | 9/14/2015 | 1335 | PDT   | NWS San Diego | Strong onshore flow will create gusty southwest to west winds in the deserts through late tonight.   |
| Urgent Weather<br>Message          | 9/14/2015 | 1404 | PDT   | NWS San Diego | <b>Blowing Dust Advisory</b> in effect until 4 pm. Affected area of eastern Riverside County and I-10 between Blythe and desert Center. Gusts to 40 mph. Visibility below 1 mile.  |
| Area Forecast<br>Discussion        | 9/14/2015 | 1526 | MST   | NWS Phoenix   | Visible satellite imagery suggests dry advection may be udnerway over southern Yuma and southeast Imperial CountyModels indicate that trend continuing eastward. This should keep storm activity over southeastern California and southwest Arizona isolatedbut strong in nature.  |
| Special weather<br>Statement       | 9/14/2015 | 1649 | MST   | NWS Phoenix   | Significant Weather Advisory for central Riverside CountyStrong thunderstorm 8 miles east of Desert Center moving north at 30 mph. Winds in excess of 40 mphstorm may generate dense blowing dust affecting motorists on I-10.   |
| Urgent Weather<br>Message          | 9/14/2015 | 2103 | PDT   | NWS San Diego | Strong and gusty winds in the deserts today. Wind Advisory for Coachella Valleya nd San Diego deserts remains in effect until 3 pm. Location along the desert slopes and wind prone adjacent desert areas. I-10 and I-8 will be impacted by strong winds.  |
| Urgent Weather<br>Message          | 9/14/2015 | 2128 | PDT   | NWS San Diego | Strong onshore flow will create gusty westerly winds across the deserts through late tonight. Surface pressure gradients continued to accelerate onshoreThis was fueiling wind gusts of of 40 mph or more through and below the desert passes.   |
| Urgent Weather<br>Message          | 9/15/2015 | 0233 | PDT   | NWS San Diego | Wind Advisory for the Coachella Valley and San Diego deserts has been Cancelled.   |

438
FXUS65 KPSR 130137 AAA
AFDPSR

AREA FORECAST DISCUSSION...UPDATED
NATIONAL WEATHER SERVICE PHOENIX AZ
635 PM MST SAT SEP 12 2015

.UPDATE...UPDATED AVIATION DISCUSSION.

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## .SYNOPSIS...

SEVERAL PACIFIC DISTURBANCES WILL MOVE INTO THE REGION SUNDAY THROUGH TUESDAY...WITH A MODEST INCREASE IN MOISTURE AND CHANCES FOR SHOWERS OR THUNDERSTORMS. THESE DISTURBANCES WILL ALSO ALLOW TEMPERATURES TO FALL SLIGHTLY BELOW AVERAGE DURING THE FIRST PAST OF THE WEEK. A MUCH DRIER AND STABLE AIRMASS WILL RETURN FOR THE LATTER HALF OF NEXT WEEK.

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## .DISCUSSION...

AFTERNOON WV IMAGERY DEPICTS AN INCREASINGLY COMPLICATED SCENARIO WITH A PRONOUNCED CIRCULATION CENTER AND DIVERGENT JET SIGNATURE APPROACHING THE CNTRL CALIFORNIA COAST...BUT LARGELY DOWNSTREAM CONFLUENT SHEARED NORTHWEST FLOW THROUGHOUT ARIZONA. HOWEVER...A SUBTLE SHORTWAVE APPEARS TO BE DROPPING SOUTH FROM THE FOUR CORNERS AREA...AIDING IN LARGER SCALE SYNOPTIC ASCENT ACROSS THE MOGOLLON RIM...WHITE MOUNTAINS...AND PORTIONS OF SRN GILA COUNTY. 12Z REGIONAL SOUNDING DATA SAMPLED PWATS AROUND 1.40 INCHES...HOWEVER ONLY MODEST 10-11 G/KG IN THE SFC-H8 LAYER...AND MORE NOTABLE MOISTURE AROUND THE H7 LAYER. ONE OF THE MORE INTERESTING ASPECTS OF THIS AFTERNOONS ANALYSIS IS UNUSUALLY COOL TEMPERATURES AT THE H5 LEVEL (-8C TO -9C) AND VERY STEEP MIDLEVEL LAPSE RATES (H7-H5 7-8 C/KM).

GIVEN THE BOUNDARY LAYER FLOW AND LIMITED MOISTURE IN THE SFC-H8 LAYER...EFFICIENT MIXING HAS ALLOWED SFC DEWPOINTS TO FALL INTO THE UPPER 40S IN SERN ARIZONA...TO MIDDLE 50S IN CNTRL ARIZONA. THESE READINGS MAY MAKE SURVIVAL OF DEEP CONVECTION INTO LOWER ELEVATION LOCATIONS DIFFICULT (IF NOT IMPOSSIBLE)...EVEN WITH MORE ORGANIZED OUTFLOWS. HOWEVER...WITH LARGE INVERTED-V PROFILES AND DCAPE VALUES 1200-1500 J/KG...CANNOT COMPLETELY DISCOUNT SOME STRONGER LONG TRAVELING OUTFLOWS IMPACTING LOW ELEVATIONS (I.E. PHOENIX METRO). OTHERWISE...SHOWER ACTIVITY IN SERN CALIFORNIA ASSOCIATED WITH A SLUG OF MIDLEVEL MOISTURE (IN AN OTHERWISE CONVECTIVELY LIMITED ENVIRONMENT) WILL CONTINUE TO LIFT NORTH THIS EVENING.

THIS FIRST IN A SERIES OF SHORTWAVES WILL LIFT INTO WRN ARIZONA SUNDAY...ALLOWING SOME MEASURE OF SLY LOW LEVEL FLOW AND MOISTURE ADVECTION. HOWEVER...AS THIS OCCURS...MODELS ARE IN EXCELLENT

# AGREEMENT DEPICTING SUBSTANTIAL WARM ADVECTION ALOFT WITH MIDLEVEL Appendix A - Supplemental

LAPSE RATES ONCE AGAIN BECOMING MORE MOIST ADIABATIC (5.5-6.0 C/KM). WHILE BOUNDARY LAYER MOISTURE MAY REALIZE A SOMEWHAT HIGHER MAGNITUDE THAN MODEL FORECAST SOUNDINGS DEPICT...AT THIS TIME ONLY 8-10 G/KG IS SUGGESTED YIELDING MLCAPES ONLY IN A 50-200 J/KG RANGE. JET DIVERGENCE FIELDS WILL ALSO BE MOST ROBUST OVER NRN ARIZONA WITH MORE ANTI-CYCLONIC FLOW ENTERING FAR SWRN ARIZONA...YET SREF PROBABILITIES AND A FAIR SUBSET OF HIGH RESOLUTION MODELS STILL SUPPORT SCT STORMS DURING PEAK HEATING WITH DEEP INVERT-V SOUNDINGS AND GUSTY WINDS POSSIBLE.

MODEL TIMING OF FOLLOW UP PACIFIC SHORTWAVES MONDAY AND TUESDAY ARE STILL CHANGING SLIGHTLY WITH EACH MODEL RUN. HOWEVER...MODELS ARE STILL CONSISTENT WITH FORECASTS OF MODERATELY STRONG 850/700 20-30 KT SOUTHERLY WINDS IN FAR WESTERN ARIZONA (PARTICULARLY MONDAY)...AND GOOD VEERING WIND PROFILES WITH HEIGHT. IN ADDITION... SYNOPTIC SCALE ASCENT WOULD BE FAVORED WITH GRADUALLY FALLING HEIGHTS ALOFT AND INCREASING JET ENERGY. HOWEVER...ONE MAJOR DETRIMENT TO CONVECTIVE ACTIVITY AND RAINFALL APPEARS TO BE ADDITIONAL WARMING ALOFT...SUCH THAT H5 TEMPERATURE REACH -5C AND CREATE VERY STRONG CAPPING ALOFT AND SEVERELY HINDERED LAPSE RATES. MODEL SOUNDINGS SHOW THE INCREASES LOW LEVEL MOISTURE RELATED TO THE STRONGER SLY FLOW...HOWEVER NO PLACE TO LIFT THIS MOISTURE. IN THE END...THIS TIME FRAME MAY END UP WITH A LOT OF MID CLOUDS ALONG A QUASI-FRONTAL BOUNDARY...BUT NOT MUCH MORE THAN A FEW SHOWERS. CONFIDENCE IN THE OVERALL EVOLUTION OF THIS PERIOD IS QUITE LOW...AND KEPT POPS SOMEWHAT RESTRICTED.

## WEDNESDAY THROUGH SATURDAY...

ALTHOUGH STRONG UPPER LEVEL SOUTHWEST WINDS WILL PERSIST OVER THE FORECAST AREA...DUE TO ADDITIONAL PACIFIC SHORTWAVES FLOWING WELL NORTH OF THE AREA...MODELS INSIST THAT STABLE AND WARM WEATHER IS IN THE OFFING. FORECASTER CONFIDENCE IS LOW FOR THIS PERIOD...THEREFORE NO SHOWER THREATS WILL BE MENTIONED. AFTN TEMPS THESE DAYS SHOULD BE NEAR NORMAL.

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## .AVIATION...

SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL... FOR THE MOST PART IT STILL APPEARS THAT STORMS THIS EVENING WILL STAY ON THE OUTSKIRTS OF THE GREATER PHOENIX AREA AS CONDITIONS ARE ONLY MODERATELY FAVORABLE AT BEST FOR LOWER DESERT THUNDERSTORM DEVELOPMENT. DUE TO LOW CHANCES FOR STORMS AFFECTING THE TERMINALS WE HAVE REMOVED THE VCTS WORDING IN THE AREA TAFS. WINDS MAY BE A BIT MORE PROBLEMATICAL FOR THE NEXT FEW HOURS AS 730 PM RADAR SHOWED A VARIETY OF OUTFLOW BOUNDARIES MOVING FROM MULTIPLE DIRECTIONS ACROSS THE CENTRAL DESERTS. THERE MAY BE SOME BLOWING DUST ASSOCIATED WITH THE MOVING BOUNDARIES BUT VISIBILITIES SHOULD REMAIN ABOVE 6SM AT THE TAF SITES.

OTHERWISE...EXPECT VARIABLE WINDS INTO THE MIDDLE OF THE EVENING BEFORE THEY SETTLE INTO A MORE NORMAL DIURNAL REGIME. IT IS POSSIBLE THAT MERGING BOUNDARIES MAY SPUR NEW STORM DEVELOPMENT INTO THE PHOENIX METROPOLITAN AREA THIS EVENING BUT IF THIS OCCURS WE WILL Appendix A - Supplemental UPDATE TAFS ACCORDINGLY.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH... BAND OF THICK MID-HIGH CLOUDS...BASES GENERALLY ABOVE FL100...WITH EMBEDDED SHOWERS WILL START DECREASING FROM SOUTHWEST TO NORTHEAST AFTER 00Z. ISOLATED THUNDERSTORMS ARE ALSO POSSIBLE...ESPECIALLY OVER LA PAZ COUNTY WHERE SURFACE HEATING HAS BEEN MUCH BETTER. THERE IS ALSO THUNDERSTORM POTENTIAL TO THE WEST OF THE FORECAST AREA OVER THE HIGHER MOUNTAINS OF SAN DIEGO AND WESTERN RIVERSIDE COUNTIES...EXPECT THOSE STORMS TO DISSIPATE AWAY FROM HIGHER TERRAIN. ANTICIPATE REGIONAL STORM ACTIVITY TO DISSIPATE WELL BEFORE MIDNIGHT. OTHERWISE...SURFACE WINDS WILL FOLLOW FAMILIAR DIURNAL PATTERNS.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

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.FIRE WEATHER...

TUESDAY THROUGH SATURDAY...

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.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ACCORDING TO STANDARD PROCEDURES.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

CA...NONE.

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VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...MO/VASQUEZ

AVIATION...AJ/CB

FIRE WEATHER...AJ

009 FXUS65 KPSR 130351 AFDPSR

AREA FORECAST DISCUSSION NATIONAL WEATHER SERVICE PHOENIX AZ 850 PM MST SAT SEP 12 2015

## .SYNOPSIS...

SEVERAL PACIFIC DISTURBANCES WILL MOVE INTO THE REGION SUNDAY THROUGH TUESDAY...WITH A MODEST INCREASE IN MOISTURE AND CHANCES FOR SHOWERS OR THUNDERSTORMS. THESE DISTURBANCES WILL ALSO ALLOW TEMPERATURES TO FALL SLIGHTLY BELOW AVERAGE DURING THE FIRST PAST OF THE WEEK. A MUCH DRIER AND STABLE AIRMASS WILL RETURN FOR THE LATTER HALF OF NEXT WEEK.

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.DISCUSSION... RELATIVELY STRONG UPPER LEVEL 591DM HIGH...CENTERED OVER SRN NEVADA...COMBINED WITH ELEVATED MOISTURE AND MODERATELY HIGH CAPE VALUES...ALLOWED ISOLATED STORMS TO DEVELOP ACROSS SOUTH CENTRAL AZ DURING THE AFTERNOON. WIND FIELDS WERE WEAK AND AS SUCH MOST OF THE STORMS WERE OF THE PULSE NATURE...INCLUDING AT LEAST ONE PULSE-SEVERE STORM THAT FORMED NEAR SACATON...AND THEY TENDED TO DEVELOP AND MOVE SLOWLY TOWARDS THE WEST DURING THE AFTERNOON/EVENING HOURS. AS OF 830 PM MOST OF THE STORMS HAD DISSIPATED EXCEPT FOR ONE SMALL CLUSTER STILL GOING OVER NORTHERN YUMA AND SOUTHEAST LA PAZ COUNTIES. EXTENSIVE CLOUD COVER INTO SERN CA ALONG WITH LOWER MLCAPE VALUES PRETTY MUCH PUT A LID ON ANY STORM DEVELOPMENT WEST OF THE LOWER CO RIVER THIS AFTERNOON AND EVENING. FOR THE REST OF TONIGHT THERE WILL BE A SLIGHT CHANCE OF LINGERING SHOWERS OR STORMS WEST OF PHOENIX...BUT CHANCES FOR CONVECTION OVER THE GREATER PHOENIX AREA IS QUITE LOW. CURRENT FORECASTS HAVE BEEN TWEAKED FOR CURRENT SKY AND WEATHER TRENDS AND NO ADDITIONAL UPDATES ARE NEEDED AT THIS TIME.

## .PREVIOUS DISCUSSION...

AFTERNOON WV IMAGERY DEPICTS AN INCREASINGLY COMPLICATED SCENARIO WITH A PRONOUNCED CIRCULATION CENTER AND DIVERGENT JET SIGNATURE APPROACHING THE CNTRL CALIFORNIA COAST...BUT LARGELY DOWNSTREAM CONFLUENT SHEARED NORTHWEST FLOW THROUGHOUT ARIZONA. HOWEVER...A SUBTLE SHORTWAVE APPEARS TO BE DROPPING SOUTH FROM THE FOUR CORNERS AREA...AIDING IN LARGER SCALE SYNOPTIC ASCENT ACROSS THE MOGOLLON RIM...WHITE MOUNTAINS...AND PORTIONS OF SRN GILA COUNTY. 12Z REGIONAL SOUNDING DATA SAMPLED PWATS AROUND 1.40 INCHES...HOWEVER ONLY MODEST 10-11 G/KG IN THE SFC-H8 LAYER...AND MORE NOTABLE MOISTURE AROUND THE H7 LAYER. ONE OF THE MORE INTERESTING ASPECTS OF THIS AFTERNOONS ANALYSIS IS UNUSUALLY COOL TEMPERATURES AT THE H5 LEVEL (-8C TO -9C) AND VERY STEEP MIDLEVEL LAPSE RATES (H7-H5 7-8 C/KM).

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

913 FXUS66 KSGX 130410 AFDSGX

AREA FORECAST DISCUSSION NATIONAL WEATHER SERVICE SAN DIEGO CA 909 PM PDT SAT SEP 12 2015

.SYNOPSIS... COOLING WILL BECOME MORE PRONOUNCED OVER THE NEXT FEW DAYS AS HIGH PRESSURE ALOFT IS REPLACED BY A LOW PRESSURE TROUGH AND ONSHORE FLOW. ISOLATED SHOWERS AND THUNDERSTORMS ARE STILL POSSIBLE OVER THE MOUNTAINS ON SUNDAY...BUT GENERALLY DRY AND COOLER WEATHER IS EXPECTED. MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA IS EXPECTED TO ARRIVE LATE MONDAY...BRINGING FOG...DRIZZLE...AND OCCASIONAL RAIN THROUGH WEDNESDAY ALONG AND WEST OF THE MOUNTAINS. DRY AND SEASONAL WEATHER IS FORECAST FOR THE LATTER HALF OF NEXT WEEK.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

MID AND HIGHER LEVEL CLOUDS WERE PREVALENT AGAIN TODAY ACROSS SOCAL...AND A FEW THUNDERSTORMS DID POP OVER THE RIVERSIDE COUNTY MTS. THIS MOISTURE WAS PARTLY SPUN OFF OF LINDA... WHICH WAS STILL SPINNING ABOUT 475 MILES SW OF SAN DIEGO. SKIES WERE CLEAR TO THE SOUTH. THE 00Z MIRAMAR SOUNDING STILL SHOWED A COUPLE DEGREES C OF WARMING BELOW 850 MBS...BUT HAD A LARGE PW DROP TO 1.28 INCH. WINDS WERE ALSO TURNING FROM PREDOMINANTLY EAST TO SSE BELOW 15K FT AND WESTERLY ABOVE. THE WIND SHIFT WILL FINALLY BRING A NOTICEABLE CHANGE TO THE AIRMASS OVER THE REGION THROUGH MON. SURFACE PRESSURE GRADIENTS WERE WEAKLY ONSHORE TO THE DESERTS...BUT THE SEA BREEZE WAS LITTLE RELIEF ALONG THE COAST LATE THIS AFTERNOON WHERE TEMPERATURES AGAIN WERE WELL INTO THE 80S TO AROUND 90 DEGREES.

WITH LESS CLOUDS...IT SHOULD BE COOLER OVERNIGHT MOST AREAS. WITH A COOLER START AND WEAKENING HIGH PRESSURE ALOFT... IT WILL STILL BE WARM...BUT COOLER THAN THE PAST FEW DAYS. SEA SURFACE TEMPERATURES OVER THE CA BIGHT HAVE RISEN TO 75-77 DEGREES F...SO THE COOLING EFFICIENCY OF THE SEA BREEZE WILL BE REDUCED FOR A WHILE. THE RESIDUAL MOISTURE AND HEATING ON SUNDAY COULD STILL FIRE OFF A FEW THUNDERSTORMS IN THE MTS...BUT MOISTURE WILL BE LIMITED...AND ACTIVITY IS NOT EXPECTED TO BE HEAVY...SHOULD IT DEVELOP.

TEMPERATURES WILL REMAIN ELEVATED ALONG THE COAST DUE TO THE RELATIVELY WARM SEA SURFACE...BUT INLAND TEMPERATURES COULD BE BELOW AVERAGE BY MON OR TUE AS MOISTURE AND CLOUDS INCREASE AHEAD OF A DEVELOPING UPPER-LEVEL TROUGH ALONG THE WEST COAST.

OF INTEREST EARLY NEXT WEEK IS THE REMNANT MOISTURE FROM LINDA. THE

LATEST DERIVED SATELLITE IMAGERY SHOWED PWS OF 2.25 INCH CENTERED

JUST A COUPLE OF HUNDRED MILES SW OF SAN DIEGO. MODELS SHOW THIS

MOISTURE REMAINING OFFSHORE THROUGH SUN...THEN GETTING CAUGHT UP IN

THE DEVELOPING TROUGH FROM THE NORTH...WHICH STEERS IS BACK TOWARD

THE SOCAL AND BAJA COASTS. RH FIELDS SHOW NEAR SATURATION OF THE

ENTIRE LAYER BELOW 5K FT AS IT COMES ASHORE ON 10-15 KT WESTERLY

WINDS MON MORNING. THE LATEST NAM12 SHOWS A WIND SHIFT APPROACHING

THE COAST WED MORNING. WINDS TURN MORE FROM THE SW AHEAD OF THE

SHIFT. THEN...DRIER WESTERLY WINDS FOLLOW LATER ON WED. SO...EXPECT

A LOT OF LOW CLOUDS...FOG...POSSIBLY DRIZZLE AND PERIODS OF RAIN

SHOWERS MON THROUGH WED MORNING ALONG AND WEST OF THE MTS.

THE DEVELOPING TROUGH ALONG THE WEST COAST IS MESSY...WITH LOTS OF WEAK DISTURBANCES MOVING THROUGH IT. A 250 MB...80 KT JET STREAK MOVES OVER SOCAL MON NIGHT. ADDITIONAL RIGHT-REAR QUAD JET DYNAMICS ARE POSSIBLE ON TUE NIGHT WHICH COULD PROVIDE MORE LIFT. ONCE THESE FEATURES PASS...THE TROUGH LINGERS ALONG THE COAST THROUGH THE END OF THE WEEK KEEPING HEIGHTS SUPPRESSED AND MAINTAINING ONSHORE FLOW. NO FURTHER RAINFALL IS EXPECTED...BUT THE TROUGH SHOULD KEEP TEMPERATURES INLAND CLOSE TO AVERAGE FOR MID SEPTEMBER.

&&

.AVIATION... 122008Z...COASTS/VALLEYS...CHANCE FOR PATCHY LOW CLOUDS WITH BASES AROUND 1000 FT MSL BETWEEN 10Z AND 16Z SUNDAY MORNING WITHIN 20 SM OF THE COAST...BUT CONFIDENCE IS LOW. OTHERWISE...SCT CLOUDS AOA 12000 FT WITH UNRESTRICTED VIS THROUGH SUNDAY.

MOUNTAINS/DESERTS...SCT CLOUDS AOA 10000 FT MSL WITH UNRESTRICTED VISIBILITY THROUGH SUNDAY.

&&

.MARINE...

800 PM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH THURSDAY.

&&

.HYDROLOGY...BASED ON THE MOISTURE FIELDS ALONE...THE UPCOMING SYSTEM EARLY NEXT WEEK HAS POTENTIAL. HOWEVER...WITHOUT A DOMINANT SHORTWAVE TO ORGANIZE THE LIFT...IT APPEARS THE DRIVERS OF PRECIP WILL BE MORE SUBTLE AND DIFFICULT TO FORECAST. THE HIRES MODELS HAVE BEEN BOUNCING AROUND WITH THE FORECAST QPF MON-WED...SO CONFIDENCE IS LOW REGARDING AMOUNTS. AMOUNTS AND TIMING OF RAINFALL AT LOWER ELEVATIONS WILL BE TRICKY...BUT GIVEN THE SATURATION PREDICTED...IT COULD BE DAMP A GOOD PORTION OF THE TIME FROM PERIODS OF DRIZZLE. HOWEVER...THERE IS SOME CONSISTENCY WITH THE MOISTURE AND LOW-MID LEVEL WIND FIELDS...SUGGESTING THE SATURATED AIRMASS WILL BE ABLE TO DEPOSIT MORE BENEFICIAL RAINFALL ON THE WEST FACING COASTAL SLOPES AS THE AIR IS LIFTED OVER SEVERAL DAYS.

&&

036 FXUS65 KPSR 130945 AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
245 AM MST SUN SEP 13 2015

.SYNOPSIS...SEVERAL PACIFIC WEATHER DISTURBANCES WILL MOVE INTO THE REGION TODAY THROUGH TUESDAY...WITH A MODEST INCREASE IN MOISTURE AND CHANCES FOR SHOWERS OR THUNDERSTORMS. THESE DISTURBANCES WILL ALSO ALLOW TEMPERATURES TO FALL SLIGHTLY BELOW AVERAGE DURING THE FIRST PAST OF THE WEEK. A MUCH DRIER AND STABLE AIRMASS WILL RETURN FOR THE LATTER HALF OF NEXT WEEK.

&&

.DISCUSSION...

TODAY AND MONDAY...

FORECASTS WILL BECOME A LITTLE TRICKY THESE DAYS AS SEVERAL PACIFIC SHORTWAVES MOVE INTO THE REGION...OVER A WARM MOIST AIRMASS...AND WITH A VERTICAL WIND SHEARED ENVIRONMENT MAINLY WESTERN AZ MONDAY.

AT 08Z A SMALL NEGATIVE TILT DIFLUENT TROF WAS SEEN MOVING ASHORE IN CENTRAL AZ...AND FORECAST TO MOVE QUICKLY SOUTHEASTWARD INTO CENTRAL AZ THIS MORNING AND AFTERNOON. ALSO AT 08Z...STARTING EARLY WERE A FEW TSTMS ON RADAR NEAR BUCKEYE...GENERALLY IN FAR WEST PHOENIX WITH TOPS TO 40 THSD FT. A CHANCE OF SHOWERS AND THUNDERSTORMS ARE FORECAST ACROSS PARTS OF SOUTHWEST AND SOUTH CENTRAL ARIZONA THROUGH THIS EVENING.

RECENT MODEL FORECASTS FOR MONDAY HAVE AMPLIFIED A SECOND MORE ENERGETIC TROF TO MOVE INTO NORTHWEST AZ BY LATE AFTERNOON. SIGNIFICANT DIFLUENT FLOW ALOFT IS FORECAST TO DEVELOP OVER PARTS OF SOUTHWEST AND SOUTH CENTRAL AZ...GENERALLY NORTH OF A LINE FROM PHOENIX TO BLYTHE CA. MODELS ARE CONSISTENT WITH FORECASTS OF MODERATELY STRONG 850/700 20-30 KT SOUTHERLY WINDS AHEAD OF THE TROF IN FAR WESTERN ARIZONA...WITH GOOD WIND VEERING PROFILES WITH HEIGHT CHARACTERISTICALLY ASSOCIATED WITH ORGANIZED CONVECTION. THERE IS ONE CAVEAT THOUGH. MODELS FORECAST A PLUME OF WARM MID LEVEL TEMPERATURES TO MOVE INTO WEST CENTRAL AND SOUTHWEST AZ THAT COULD STABILIZE THE AIRMASS. SPC IN THEIR CONVECTIVE OUTLOOK FOR DAY 2 (MONDAY)...HAVE NEARLY ALL OF AZ IN GENERAL TSTM POTENTIAL. THEREFORE DUE TO THIS ENERGETIC TROF...AND CONCERNS ABOUT POTENTIAL SHWR COVERAGE AND INTENSITY...WE WILL CONTINUE WITH A CHANCE OF SHOWERS AND THUNDERSTORMS OVER PARTS OF SOUTHWEST AND SOUTH CENTRAL AZ...INCLUDING PHOENIX.

TUESDAY...

NOT SURE ABOUT TUESDAY. VERY STRONG SOUTHWESTERLY FLOW ALOFT ASSOCIATED WITH ANOTHER PACIFIC SHORTWAVE FORECAST TO MOVE ACROSS FAR NORTHERN AZ COULD RESULT IN SHOWER POTENTIAL IN SOUTH CENTRAL. CONFIDENCE IS LOW. THEREFORE WE WILL CONTINUE WITH A SLIGHT CHANCE OF SHOWERS AND TSTMS GENERALLY FROM PHOENIX EASTWARD.

WEDNESDAY THROUGH SUNDAY...

ALTHOUGH STRONG UPPER LEVEL SOUTHWEST WINDS WILL CONTINUE...DUE TO ADDITIONAL PACIFIC SHORTWAVES FLOWING WELL NORTH OF THE AREA... MODELS INSIST THAT A STABLE AND WARM AIRMASS WILL PRECLUDE ANY SHWR ACTIVITY. AFTN TEMPS THESE DAYS SHOULD BE NEAR NORMAL.

&&

## .AVIATION...

SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL... FOR THE MOST PART IT STILL APPEARS THAT STORMS THIS EVENING WILL STAY ON THE OUTSKIRTS OF THE GREATER PHOENIX AREA AS CONDITIONS ARE ONLY MODERATELY FAVORABLE AT BEST FOR LOWER DESERT THUNDERSTORM DEVELOPMENT. DUE TO LOW CHANCES FOR STORMS AFFECTING THE TERMINALS WE HAVE REMOVED THE VCTS WORDING IN THE AREA TAFS. WINDS MAY BE A BIT MORE PROBLEMATICAL FOR THE NEXT FEW HOURS AS 730 PM RADAR SHOWED A VARIETY OF OUTFLOW BOUNDARIES MOVING FROM MULTIPLE DIRECTIONS ACROSS THE CENTRAL DESERTS. THERE MAY BE SOME BLOWING DUST ASSOCIATED WITH THE MOVING BOUNDARIES BUT VISIBILITIES SHOULD REMAIN ABOVE 6SM AT THE TAF SITES.

OTHERWISE...EXPECT VARIABLE WINDS INTO THE MIDDLE OF THE EVENING BEFORE THEY SETTLE INTO A MORE NORMAL DIURNAL REGIME. IT IS POSSIBLE THAT MERGING BOUNDARIES MAY SPUR NEW STORM DEVELOPMENT INTO THE PHOENIX METROPOLITAN AREA THIS EVENING BUT IF THIS OCCURS WE WILL UPDATE TAFS ACCORDINGLY.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH... BAND OF THICK MID-HIGH CLOUDS...BASES GENERALLY ABOVE FL100...WITH EMBEDDED SHOWERS WILL START DECREASING FROM SOUTHWEST TO NORTHEAST AFTER 00Z. ISOLATED THUNDERSTORMS ARE ALSO POSSIBLE...ESPECIALLY OVER LA PAZ COUNTY WHERE SURFACE HEATING HAS BEEN MUCH BETTER. THERE IS ALSO THUNDERSTORM POTENTIAL TO THE WEST OF THE FORECAST AREA OVER THE HIGHER MOUNTAINS OF SAN DIEGO AND WESTERN RIVERSIDE COUNTIES...EXPECT THOSE STORMS TO DISSIPATE AWAY FROM HIGHER TERRAIN. ANTICIPATE REGIONAL STORM ACTIVITY TO DISSIPATE WELL BEFORE MIDNIGHT. OTHERWISE...SURFACE WINDS WILL FOLLOW FAMILIAR DIURNAL PATTERNS.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...
TUESDAY THROUGH SATURDAY...

LINGERING MOISTURE WILL KEEP SLIGHT THUNDERSTORM CHANCES GOING

TUESDAY...MAINLY EAST OF THE LOWER COLORADO RIVER VALLEY. MOISTURE
WILL DECLINE WEDNESDAY ONWARD FOR REMOVAL OF STORM CHANCES. WITH
DRIER AIR...MINIMUM HUMIDITIES WILL DECLINE WITH MOST LOWER
ELEVATIONS DROPPING BELOW 20 PERCENT BY FRIDAY. OVERNIGHT RECOVERY
DECLINES AS WELL BUT REMAINS GOOD. TEMPERATURES WILL BE BELOW NORMAL
TUESDAY FOLLOWED BY A SLOW WARMING TREND. WINDS WILL TEND TO BE
LIGHT AND FAVOR SOUTHWEST AND WEST DIRECTIONS DURING THE AFTERNOONS
AND EVENINGS.

&&

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ACCORDING TO STANDARD PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...
AZ...NONE.

CA...NONE.

&&

\$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...VASQUEZ AVIATION...AJ/CB FIRE WEATHER...AJ

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

# **Department of Agronomy**

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548 FXUS66 KSGX 131138 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
438 AM PDT SUN SEP 13 2015

## .SYNOPSIS...

DRYING WILL CONTINUE TODAY WITH HIGH TEMPERATURES A FEW DEGREES COOLER IN MOST AREAS EXCEPT FOR THE LOWER DESERTS. FOR MONDAY THROUGH EARLY WEDNESDAY...MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA WILL BRING PERIODS OF RAIN...MOSTLY LIKELY FOR MONDAY NIGHT AND TUESDAY...WITH THE GREATER RAINFALL AMOUNTS MOST LIKELY ON THE COASTAL MOUNTAIN SLOPES. DRYING AND A WARMING TREND WILL FOLLOW INTO NEXT WEEKEND.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

THE DRYING OF MID LEVEL MOISTURE THAT BEGAN FRIDAY NIGHT AND SATURDAY WILL CONTINUE. THERE WERE ONLY A FEW ISOLATED THUNDERSTORMS OVER THE RIVERSIDE COUNTY MOUNTAINS SATURDAY AFTERNOON. WITH THE ADDITIONAL DRYING...ONLY CLOUDS OVER THE MOUNTAINS AND NO THUNDERSTORMS ARE EXPECTED FOR THIS AFTERNOON. A FEW DEGREES OF COOLING IS EXPECTED FOR MOST AREAS TODAY EXCEPT FOR THE LOWER DESERTS.

LOWER LEVEL MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA WILL BEGIN TO ARRIVE LATE TONIGHT AND MONDAY. THE LOWEST SEVERAL THOUSAND FEET OF THE ATMOSPHERE WILL BECOME NEARLY SATURATED ALONG AND WEST OF THE MOUNTAINS FOR MONDAY NIGHT AND TUESDAY INTO TUESDAY EVENING. THE ATMOSPHERE WILL BE STABLE AND ANY UPPER LEVEL LIFT IS EXPECTED TO BE LIMITED. THE PRIMARY AVAILABLE LIFT WILL BE ALONG THE COASTAL MOUNTAINS SLOPES PROVIDED BY THE ONSHORE FLOW. RAINFALL AMOUNTS FOR LATE MONDAY THROUGH EARLY WEDNESDAY COULD RANGE FROM A FEW TENTHS OF AN INCH NEAR THE COAST TO 1 TO 2 INCHES ON THE COASTAL MOUNTAIN SLOPES. THE MOST LIKELY TIME FOR MORE WIDESPREAD RAINFALL AND SOMEWHAT GREATER RAINFALL AMOUNTS IS EXPECTED TO BE FOR MONDAY NIGHT AND TUESDAY...FOLLOWED BY DECREASING CHANCES AND AMOUNTS INTO EARLY WEDNESDAY.

DRYING IS EXPECTED TO ARRIVE WEDNESDAY WITH A FEW LINGERING SHOWERS POSSIBLE IN THE MOUNTAINS INTO WEDNESDAY AFTERNOON. DRY WEATHER WILL FOLLOW THROUGH NEXT WEEKEND.

THE INCREASE IN MOISTURE WILL BRING COOLER INLAND HIGH
TEMPERATURES FOR MONDAY INTO WEDNESDAY. A WARMING TREND WILL
FOLLOW FOR THURSDAY THROUGH NEXT WEEKEND WITH HIGH TEMPERATURES

# WARMING TO A LITTLE ABOVE AVERAGE FOR NEXT WEEKEND.

TEMPERATURES NEAR THE SAN DIEGO COUNTY COAST MAY NOT FALL BELOW 70 THROUGH NEXT WEEKEND WITH WATER TEMPERATURES NEAR THE COAST NOW RUNNING IN THE UPPER 70S...THE WARMEST OF THE SUMMER SO FAR.

&&

.AVIATION...

130950Z...COASTS/VALLEYS...A FEW PATCHES OF STRATUS MAY DEVELOP OVER THE COASTAL WATERS THROUGH THE AFTERNOON BUT ARE NOT EXPECTED TO REACH THE COASTAL AIRPORTS. OTHERWISE SCT CLOUDS AOA 15000 FT MSL. WIDESPREAD STRATUS RAPIDLY DEVELOPING THIS EVENING WITH BASES 1500-2000 FT MSL AND TOPS 2500-3000 FT MSL. TIMING OF ARRIVAL AT COASTAL AIRPORTS IN UNCERTAIN...POSSIBLY AS EARLY AS 14/00Z BUT MORE LIKELY CLOSER TO THE 14/03-06Z TIME FRAME. STRATUS SPREADING INTO THE INLAND VALLEYS OVERNIGHT WITH TOPS LIFTING TO AROUND 4000 FT MSL. LOWER COASTAL SLOPES OF THE MTNS WILL BE OBSCURED.

MOUNTAINS/DESERTS...SCT CU DEVELOPING OVER THE MTN RIDGES THIS AFTERNOON AND DISSIPATING SHORTLY AFTER SUNSET. CHANCE OF SHRA/TSRA MINIMAL. LOWER COASTAL SLOPES OF THE MTNS OBSCURED IN CLOUDS/FOG BY EARLY MONDAY MORNING. OTHERWISE FEW-SCT CLOUDS AOA 10000 FT MSL WITH UNRESTRICTED VISIBILITY.

&&

.MARINE...

300 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH THURSDAY.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...SS



College of Ag

Department of Agronomy

483 FXUS66 KSGX 131629 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
929 AM PDT SUN SEP 13 2015

.SYNOPSIS...

DRY TODAY WITH SLIGHTLY COOLER WEATHER. MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA WILL HELP CREATE PERIODS OF RAIN...MOSTLY MONDAY NIGHT AND TUESDAY...WITH THE GREATEST RAINFALL AMOUNTS EXPECTED ON THE COASTAL MOUNTAIN SLOPES. DRYING AND A WARMING TREND WILL FOLLOW THURSDAY INTO NEXT WEEKEND.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

AT 9 AM PDT...WATER VAPOR SATELLITE IMAGERY DISPLAYED AN UPPER-LEVEL RIDGE OVER NEW MEXICO...AND AN UPPER-LEVEL LOW OVER THE BAY AREA. VISIBLE SATELLITE SHOWED SOME MID AND HIGH LEVEL CLOUDS OVER PORTIONS OF THE CWA. THE 13/1200 UTC KNKX SOUNDING CALCULATED A PRECIPITABLE WATER OF 1.38 INCHES. CONVECTION IS UNLIKELY TODAY OVER THE MOUNTAINS AND DESERTS DUE TO ADDITIONAL DRYING IN THE ATMOSPHERE. INCREASING ONSHORE SURFACE PRESSURE GRADIENTS AND LOWER HEIGHTS ALOFT WILL HELP LOWER HIGH TEMPERATURES INLAND TODAY AROUND 3 TO 6 DEG F COMPARED TO YESTERDAY.

AN UPPER-LEVEL TROUGH WILL SET UP ALONG THE WEST COAST FOR MOST OF NEXT WEEK. THIS IS NOT UNUSUAL FOR THIS TIME OF YEAR. HOWEVER...A LARGE AMOUNT OF LOWER-LEVEL MOISTURE FROM THE REMNANTS OF TROPICAL CYCLONE LINDA WILL MOVE INTO THE AREA FROM MONDAY THROUGH WEDNESDAY. THIS MOISTURE...COMBINED WITH WEAK TO MODERATE ONSHORE FLOW...WILL CREATE THE INGREDIENTS FOR SHOWER DEVELOPMENT FROM UPSLOPE FLOW. A FEW WEAK WAVES MOVING ACROSS THE REGION WILL ENHANCE SOME SHOWERS...AND CREATE THE POSSIBILITY OF HIGHER RAINFALL AMOUNTS ALONG THE COAST. THE GREATEST COVERAGE OF SHOWERS IS EXPECTED FROM MONDAY AFTERNOON THROUGH TUESDAY...WITH SOME DRY LULLS BETWEEN THE HEAVY SPURTS. HIGHEST RAINFALL AMOUNTS ARE FORECAST ALONG THE COASTAL MOUNTAIN SLOPES...WHERE STORM TOTAL PRECIP AMOUNTS UP TO 2 INCHES ARE POSSIBLE. NO SNOW IS FORECAST AS THE SNOW LEVEL WILL BE TOO HIGH. HIGH TEMPERATURES WILL LOWER TO 5 TO 10 DEG F BELOW NORMAL BY TUESDAY. BREEZY WESTERLY WINDS WILL DEVELOP OVER THE MOUNTAINS AND DESERTS MONDAY THROUGH WEDNESDAY...WITH LOCAL GUSTS NEAR 45 MPH POSSIBLE THROUGH FAVORED MOUNTAIN PASSES AND ALONG DESERT MOUNTAIN SLOPES.

DRIER AIR WILL MOVE INTO THE REGION LATE WEDNESDAY...ELIMINATING PRECIPITATION CHANCES FOR THURSDAY THROUGH NEXT SUNDAY. HEIGHTS

September 14, 2015 Exceptional Event Imperial County
WILL SLOWLY BUILD ALOFT...WHICH WILL CREATE A MORE SHALLOW MARINE
LAYER AND INCREASE HIGH TEMPERATURES TO AROUND 5 TO 10 DEG F ABOVE
NORMAL BY NEXT SUNDAY.

&&

.AVIATION...

131500Z...COASTS/VALLEYS... A FEW HIGH CLOUDS AROUND AT
15000 FT MSL OR ABOVE. THE MARINE AIR WILL RETURN RAPIDLY THIS
EVENING WITH STRATUS FORMING. CLOUD BASES SHOULD BE 1500-2000 FT MSL
AND TOPS 2500-3000 FT MSL. TIMING OF ARRIVAL AT COASTAL AIRPORTS IN
UNCERTAIN...POSSIBLY AS EARLY AS 14/0000Z BUT MORE LIKELY CLOSER TO
THE 14/03-06Z TIME FRAME. STRATUS WILL SPREAD INTO THE INLAND
VALLEYS OVERNIGHT WITH TOPS LIFTING TO AROUND 4000 FT MSL. LOWER
COASTAL SLOPES OF THE MTNS WILL BE OBSCURED.

MOUNTAINS/DESERTS...SCT CU AND ALTOCUMULUS WILL DEVELOPING OVER THE MTN RIDGES THIS AFTERNOON AND DISSIPATING SHORTLY AFTER SUNSET. WITH THE DRIER AIR IN THE MID AND UPPER LEVELS...CHANCE OF SHRA/TSRA MINIMAL. LOWER COASTAL SLOPES OF THE MTNS OBSCURED IN CLOUDS/FOG BY EARLY MONDAY MORNING. OTHERWISE FEW-SCT CLOUDS AOA 15000 FT MSL WITH UNRESTRICTED VISIBILITY.

&&

.MARINE...

800 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH THURSDAY.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

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PUBLIC...JJT

AVIATION/MARINE...PIERCE



606

FXUS65 KPSR 131630 AFDPSR

AREA FORECAST DISCUSSION NATIONAL WEATHER SERVICE PHOENIX AZ 930 AM MST SUN SEP 13 2015

#### .SYNOPSIS...

SEVERAL PACIFIC WEATHER DISTURBANCES WILL MOVE INTO THE REGION TODAY THROUGH TUESDAY...WITH A MODEST INCREASE IN MOISTURE AND CHANCES FOR SHOWERS OR THUNDERSTORMS. THESE DISTURBANCES WILL ALSO ALLOW TEMPERATURES TO FALL SLIGHTLY BELOW AVERAGE DURING THE FIRST PAST OF THE WEEK. A MUCH DRIER AND STABLE AIRMASS WILL RETURN FOR THE LATTER HALF OF NEXT WEEK.

#### ጴጴ

#### .DISCUSSION...

A BATCH OF MID AND HIGH CLOUDS OVER PORTIONS OF ARIZONA INCLUDING PHOENIX METRO IS ASSOCIATED WITH A SHORT WAVE WHICH HAS AT LEAST ONE OR TWO VORT MAXES EMBEDDED WITHIN IT. AT LEAST SOME OF THE CLOUD MATERIAL IS DEBRIS FROM CONVECTION LAST NIGHT. THIS SHORT WAVE IS BEING PUSHED SLOWLY NORTH-NORTHEASTWARD BY A LOW PRESSURE SYSTEM CENTERED NEAR THE S.F. BAY AREA THIS MORNING. AREA SOUNDINGS THIS MORNING SHOW SIGNIFICANT 24 HOUR MOISTENING IN THE 1000-700 MB LAYER AT VEF AND FGZ WITH LESS INCREASE AT TWC AND VERY LITTLE CHANGE AT PSR. NO SOUNDING AVAILABLE FROM 1Y7/8/9. ONE NOTABLE CHANGE HOWEVER IS COOLING NEAR AND ABOVE 500 MB. SO IF PARCELS CAN REACH THE LFC THERE WOULD BE MORE CAPE AVAILABLE. HOWEVER...AS THE SHORT WAVE AXIS SHIFTS NORTH-NORTHEASTWARD...SOMEWHAT WARMER AIR ALOFT WILL BE ADVECTED IN. SOMETHING THAT WOULD HAVE A MORE SIGNIFICANT IMPACT ON CAPE IS DECLINING MOISTURE IN THE LOWER LEVELS AS IS FORECAST BY MULTIPLE MODELS FOR THIS AFTERNOON. MEANWHILE...AN UPPER LEVEL SHORT WAVE WILL BE TRAVERSING THE MOHAVE DESERT AND MOVING THROUGH MAINLY NORTHERN ARIZONA. MODELS DEPICT VARYING DEGREES OF UPPER DIVERGENCE AFFECTING OUR AREA...MAINLY SOUTH-CENTRAL ARIZONA...WITH THE BULK OF IT TO OUR NORTH. LATEST RAP RUNS SHOW QUITE A BIT OF UPPER DIVERGENCE OVER NORTHERN AND EAST-CENTRAL ARIZONA INCLUDING OUR ZONE 24 AND GO ON TO INDICATE CONVECTION PROPAGATING TO THE LOWER DESERTS THIS EVENING...LARGELY AGAINST THE STEERING FLOW. POPS OVER PHOENIX AREA MAY BE A BIT OVERDONE PRIOR TO LATE AFTERNOON/EARLY EVENING DUE TO CLOUD COVER. HOWEVER...WITH VORTICITY AROUND THERE COULD BE POP UP SHOWERS. MAY NEED TO MAKE SOME TWEAKS TO POPS AND TEMPS BUT NO MAJOR SURGERY. MORE LATER.

## &&

.PREVIOUS DISCUSSION ISSUED 245 AM...

TODAY AND MONDAY...

FORECASTS WILL BECOME A LITTLE TRICKY THESE DAYS AS SEVERAL PACIFIC SHORTWAVES MOVE INTO THE REGION...OVER A WARM MOIST AIRMASS...AND WITH A VERTICAL WIND SHEARED ENVIRONMENT MAINLY WESTERN AZ MONDAY.

AT 08Z A SMALL NEGATIVE TILT DIFLUENT TROF WAS SEEN MOVING ASHORE IN CENTRAL AZ...AND FORECAST TO MOVE QUICKLY SOUTHEASTWARD INTO CENTRAL AZ THIS MORNING AND AFTERNOON. ALSO AT 08Z...STARTING EARLY WERE A FEW TSTMS ON RADAR NEAR BUCKEYE...GENERALLY IN FAR WEST PHOENIX WITH TOPS TO 40 THSD FT. A CHANCE OF SHOWERS AND THUNDERSTORMS ARE FORECAST ACROSS PARTS OF SOUTHWEST AND SOUTH CENTRAL ARIZONA THROUGH THIS EVENING.

RECENT MODEL FORECASTS FOR MONDAY HAVE AMPLIFIED A SECOND MORE ENERGETIC TROF TO MOVE INTO NORTHWEST AZ BY LATE AFTERNOON.

SIGNIFICANT DIFLUENT FLOW ALOFT IS FORECAST TO DEVELOP OVER PARTS OF SOUTHWEST AND SOUTH CENTRAL AZ...GENERALLY NORTH OF A LINE FROM PHOENIX TO BLYTHE CA. MODELS ARE CONSISTENT WITH FORECASTS OF MODERATELY STRONG 850/700 20-30 KT SOUTHERLY WINDS AHEAD OF THE TROF IN FAR WESTERN ARIZONA...WITH GOOD WIND VEERING PROFILES WITH HEIGHT CHARACTERISTICALLY ASSOCIATED WITH ORGANIZED CONVECTION. THERE IS ONE CAVEAT THOUGH. MODELS FORECAST A PLUME OF WARM MID LEVEL TEMPERATURES TO MOVE INTO WEST CENTRAL AND SOUTHWEST AZ THAT COULD STABILIZE THE AIRMASS. SPC IN THEIR CONVECTIVE OUTLOOK FOR DAY 2 (MONDAY)...HAVE NEARLY ALL OF AZ IN GENERAL TSTM POTENTIAL. SHURR COVERAGE AND INTENSITY...WE WILL CONTINUE WITH A CHANCE OF SHOWERS AND THUNDERSTORMS OVER PARTS OF SOUTHWEST AND SOUTH CENTRAL

# AZ...INCLESCRETE PROPERTY 14, 2015 Exceptional Event, Imperial County

TUESDAY...

NOT SURE ABOUT TUESDAY. VERY STRONG SOUTHWESTERLY FLOW ALOFT ASSOCIATED WITH ANOTHER PACIFIC SHORTWAVE FORECAST TO MOVE ACROSS FAR NORTHERN AZ COULD RESULT IN SHOWER POTENTIAL IN SOUTH CENTRAL. CONFIDENCE IS LOW. THEREFORE WE WILL CONTINUE WITH A SLIGHT CHANCE OF SHOWERS AND TSTMS GENERALLY FROM PHOENIX EASTWARD.

WEDNESDAY THROUGH SUNDAY...

ALTHOUGH STRONG UPPER LEVEL SOUTHWEST WINDS WILL CONTINUE...DUE TO ADDITIONAL PACIFIC SHORTWAVES FLOWING WELL NORTH OF THE AREA... MODELS INSIST THAT A STABLE AND WARM AIRMASS WILL PRECLUDE ANY SHWR ACTIVITY. AFTN TEMPS THESE DAYS SHOULD BE NEAR NORMAL.

&&

.AVIATION...

SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...

WILL SEE BETTER SHOT AT SOME SHOWERS AND THUNDERSTORMS
TODAY...MAINLY STARTING LATE IN THE AFTERNOON AND THROUGH THE
EVENING. COULD SEE A FEW STRONG STORMS INCLUDING GUSTY OUTFLOW WINDS
AND POTENTIALLY BLOWING DUST. HAVE MEDIUM CONFIDENCE IN TIMING FOR
VCTS IN TAFS...BUT COULD HAPPEN AN HOUR OR TWO EARLIER IF STORMS GET
GOING QUICKLY EARLY IN THE AFTERNOON. WIND DIRECTIONS AND SPEEDS WILL
BECOME PROBLEMATIC LATE THIS AFTERNOON AND EVENING DUE TO A DECENT
LIKELIHOOD OF SEVERAL OUTFLOWS AFFECTING THE PHOENIX AREA.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...

WILL SEE MID AND HIGH CLOUD DECKS PERSIST THROUGH MUCH OF THE DAY AND A PREDOMINANT SOUTH TO WESTERLY DIRECTION. SOME OCCASIONAL GUSTINESS WILL BE POSSIBLE THIS AFTERNOON AND EVENING...BUT GUSTS ARE EXPECTED TO REMAIN LESS THAN 20KTS.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...

TUESDAY THROUGH SATURDAY...

LINGERING MOISTURE WILL KEEP SLIGHT THUNDERSTORM CHANCES GOING TUESDAY...MAINLY EAST OF THE LOWER COLORADO RIVER VALLEY. MOISTURE WILL DECLINE WEDNESDAY ONWARD FOR REMOVAL OF STORM CHANCES. WITH DRIER AIR...MINIMUM HUMIDITIES WILL DECLINE WITH MOST LOWER ELEVATIONS DROPPING BELOW 20 PERCENT BY FRIDAY. OVERNIGHT RECOVERY DECLINES AS WELL BUT REMAINS GOOD. TEMPERATURES WILL BE BELOW NORMAL TUESDAY FOLLOWED BY A SLOW WARMING TREND. WINDS WILL TEND TO BE LIGHT AND FAVOR SOUTHWEST AND WEST DIRECTIONS DURING THE AFTERNOONS AND EVENINGS.

&&

.SPOTTER INFORMATION STATEMENT...
SPOTTERS ARE ENCOURAGED TO REPORT ACCORDING TO STANDARD PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

CA...NONE.

\$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...AJ
PREVIOUS DISCUSSION...VASQUEZ
AVIATION...KUHLMAN
FIRE WEATHER...AJ

845 FXUS66 KSGX 132037 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
137 PM PDT SUN SEP 13 2015

## .SYNOPSIS...

DRY TODAY WITH SLIGHTLY COOLER WEATHER. MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA WILL HELP CREATE PERIODS OF RAIN...MOSTLY MONDAY NIGHT AND TUESDAY...WITH THE GREATEST RAINFALL AMOUNTS EXPECTED ON THE COASTAL MOUNTAIN SLOPES. DRYING AND A WARMING TREND WILL FOLLOW THURSDAY INTO NEXT WEEKEND.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

AT 1 PM PDT...WATER VAPOR SATELLITE IMAGERY DISPLAYED AN UPPER-LEVEL RIDGE OVER NEW MEXICO...AND AN UPPER-LEVEL LOW OVER THE BAY AREA. VISIBLE SATELLITE SHOWED SOME CUMULUS BUILD-UPS OVER THE MOUNTAIN RIDGES. THE 13/1200 ECMWF AND GFS ARE IN RELATIVELY GOOD AGREEMENT THROUGH THE LONG-TERM.

AN UPPER-LEVEL TROUGH WILL SET UP ALONG THE WEST COAST FOR MOST OF NEXT WEEK. THIS IS NOT UNUSUAL FOR THIS TIME OF YEAR. HOWEVER...A LARGE AMOUNT OF LOWER-LEVEL MOISTURE FROM THE REMNANTS OF TROPICAL CYCLONE LINDA WILL MOVE INTO THE AREA FROM MONDAY THROUGH WEDNESDAY. THIS MOISTURE...COMBINED WITH WEAK TO MODERATE ONSHORE FLOW...WILL CREATE THE INGREDIENTS FOR SHOWER DEVELOPMENT FROM UPSLOPE FLOW. A FEW WEAK WAVES MOVING ACROSS THE REGION WILL ENHANCE SOME SHOWERS...AND CREATE THE POSSIBILITY OF HIGHER RAINFALL AMOUNTS ALONG THE COAST. THE GREATEST COVERAGE OF SHOWERS IS EXPECTED FROM MONDAY AFTERNOON THROUGH TUESDAY...WITH SOME DRY LULLS BETWEEN THE HEAVY SPURTS. HIGHEST RAINFALL AMOUNTS ARE FORECAST ALONG THE COASTAL MOUNTAIN SLOPES...WHERE STORM TOTAL PRECIP AMOUNTS TO JUST OVER 2 INCHES ARE POSSIBLE. NO SNOW IS FORECAST AS THE SNOW LEVEL WILL BE TOO HIGH. HIGH TEMPERATURES WILL LOWER TO 5 TO 10 DEG F BELOW NORMAL BY TUESDAY. BREEZY WESTERLY WINDS WILL DEVELOP OVER THE MOUNTAINS AND DESERTS MONDAY THROUGH WEDNESDAY....WITH LOCAL GUSTS NEAR 45 MPH POSSIBLE THROUGH FAVORED MOUNTAIN PASSES AND ALONG DESERT MOUNTAIN SLOPES.

DRIER AIR WILL MOVE INTO THE REGION LATE WEDNESDAY...ELIMINATING PRECIPITATION CHANCES FOR THURSDAY THROUGH NEXT SUNDAY. HEIGHTS WILL SLOWLY BUILD ALOFT...WHICH WILL CREATE A MORE SHALLOW MARINE LAYER AND INCREASE HIGH TEMPERATURES TO AROUND 5 TO 10 DEG F ABOVE NORMAL BY NEXT SUNDAY.

.AVIATION...

132000Z...COASTS/VALLEYS...A FEW HIGH CLOUDS AROUND AT
15000 FT MSL OR ABOVE FOR THE REST OF THE DAY. THE MARINE AIR WILL
RETURN RAPIDLY THIS EVENING...BASED ON MODEL GUIDANCE WITH STRATUS
FORMING. CLOUD BASES SHOULD BE 1500-2000 FT MSL AND TOPS 2500-3000
FT MSL. VERY WARM AIR AND WATER TEMPERATURES EXIST AND WILL MAKE THE
FORECASTING OF ARRIVAL OF CEILINGS AT COASTAL AIRPORTS EVEN MORE
UNCERTAIN THAN USUAL AFTER A LONG HEAT EVENT LIKE THIS. STRATUS
COULD FORM AS EARLY AS 14/0000Z...BUT MORE LIKELY CLOSER TO THE
14/03-06Z TIME FRAME. STRATUS WILL SPREAD INTO THE INLAND VALLEYS
OVERNIGHT WITH TOPS LIFTING TO AROUND 4000 FT MSL. THE LOWER COASTAL
SLOPES OF THE MOUNTAINS WILL BE OBSCURED AT TIMES.

September 14, 2015 Exceptional Event, Imperial County

MOUNTAINS/DESERTS...SCT CLOUDS DEVELOPED OVER THE MTN RIDGES THIS AFTERNOON AND WILL DISSIPATE SHORTLY AFTER SUNSET. THE MARINE LAYER WILL MAKE ITS WAY INLAND...INCLUDING THE INLAND EMPIRE. THE LOWER COASTAL SLOPES OF THE MTNS WILL BE OBSCURED IN CLOUDS/FOG BY EARLY MONDAY MORNING. OTHERWISE FEW-SCT CLOUDS AOA 15000 FT MSL WITH UNRESTRICTED VISIBILITY.

&&

.MARINE...

800 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH THURSDAY.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...JJT

AVIATION/MARINE...PIERCE



College of Ag

1/17/2018

IEM:: NOW from NWS PSR September 14, 2015 Exceptional Event, Imperial County

**Appendix A - Supplemental** 

iastate.edu

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Directory

Maps

Safety

Sign Ons

# Iowa State University

**Iowa Environmental Mesonet** 

MENU

SEARCH

# National Weather Service Raw Text Product

Displaying AFOS PIL: NOWPSR Received: 2015-09-14 02:18 UTC

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068 FPUS75 KPSR 140218 NOWPSR

SHORT TERM FORECAST NATIONAL WEATHER SERVICE PHOENIX AZ 718 PM MST SUN SEP 13 2015

AZZ020-025-026-140430-LOWER COLORADO RIVER VALLEY AZ-YUMA/MARTINEZ LAKE AND VICINITY-SOUTHWEST DESERTS-INCLUDING THE CITIES OF...EHRENBERG...PARKER...FORTUNA FOOTHILLS... SAN LUIS...SOMERTON...YUMA...DATELAND...TACNA...WELLTON 718 PM MST SUN SEP 13 2015

.NOW...LOCALLY REDUCED VISIBILITIES IN BLOWING DUST IS POSSIBLE FOR THE NEXT HOUR OR SO DUE TO DISTANT THUNDERSTORMS. WINDS IN EXCESS OF 30 MPH ARE POSSIBLE ACROSS FAR SOUTHWEST YUMA COUNTY...INCLUDING PORTIONS OF HIGHWAY 95 AND INTERSTATE 8. DRIVERS SHOULD USE CAUTION IF TRAVELING AND EXPERIENCING GUSTY WINDS OR REDUCED VISIBILITY.

\$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

# **IOWA STATE UNIVERSITY**

College of Ag Department of Agronomy

## **Department of Agronomy**

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FXUS66 KSGX 140431 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
930 PM PDT SUN SEP 13 2015

## .SYNOPSIS...

CLOUDS AND MOISTURE WILL BE INCREASING ACROSS SOUTHERN CALIFORNIA THROUGH TUESDAY AS LOW PRESSURE DROPS SOUTH ALONG THE WEST COAST AND PICKS UP THE REMNANT MOISTURE LEFT BEHIND BY LINDA. ONSHORE FLOW WILL INCREASE AND REBUILD THE MARINE LAYER...SENDING COOLER...MOIST AIR FAR INLAND ALONG THE COASTAL MOUNTAIN SLOPES. PERIODS OF RAIN AND DRIZZLE ARE LIKELY...WITH FOG ALONG THE COASTAL SLOPES BEGINNING LATE MONDAY THROUGH EARLY WEDNESDAY. A DRYING AND A WARMING TREND WILL FOLLOW THURSDAY INTO NEXT WEEKEND.

## &&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

THE COOLING CONTINUED TODAY WITH DAYTIME TEMPERATURES SEVERAL DEGREES LOWER THAN YESTERDAY...EXCEPT IN THE LOWER DESERTS WHERE IT WAS WARMER. SKIES WERE CLEAR...EXCEPT OVER THE MOUNTAINS WHERE CUMULUS CLOUDS DEVELOPED WITH ISOLATED THUNDERSTORMS OVER THE SANTA ROSA MOUNTAINS...AND PORTIONS OF HE COACHELLA VALLEY AND SAN DIEGO COUNTY DESERTS. NO FLOODING WAS REPORTED...BUT RADAR INDICATED A FEW SPOTS WITH BRIEFLY HEAVY RAINFALL. THE 00Z MIRAMAR SOUNDING SHOWED FURTHER DRYING AS WINDS BELOW 15K FT VEERED MORE FROM THE SOUTH. SURFACE PRESSURE GRADIENTS WERE ACCELERATING ONSHORE TO THE LOWER DESERTS AT AROUND 5 MBS...BUT REMAINED WEAK OFFSHORE FROM NV. LOCALLY GUSTY WESTERLY WINDS WERE BLOWING THROUGH THE MOUNTAIN PASSES INTO THE DESERTS LATE TODAY.

SATELLITE IMAGERY THIS EVENING SHOWED CLEAR SKIES OVER SOCAL...BUT ABOUT 500 MILES TO THE SW...A REMNANT CIRCULATION FROM LINDA WAS SPINNING UP A FEW SHOWERS. ALSO THE BLENDED TPW IMAGERY ACROSS THIS AREA STILL SHOWED PWS AROUND TWO INCHES. FARTHER TO THE NW...WATER VAPOR IMAGERY SHOWED A TROUGH DIGGING SOUTH OFF THE CANADIAN COAST...AND A WEAKER DISTURBANCE OFF THE CENTRAL CA COAST AROUND 130W. EVEN THOUGH IT IS WEAK...THIS DISTURBANCE IS FORECAST TO MOVE ESE...ACCOMPANIED BY AN 80 KT JET ALOFT...WITH ENOUGH CURVATURE TO CAUSE LIFT OVER SOCAL BY LATE MON. OVERNIGHT...MODELS FORECAST A DEEP SATURATION TO DEVELOP WHICH WILL LIKELY RESULT IN A THICK BLANKET OF CLOUDS AND SOME SHOWERS. A STRONGER UPPER-LEVEL SHORTWAVE WILL SWING THROUGH THE DEEPENING TROUGH ON TUE AND TUE NIGHT...AND MAY AGAIN IGNITE A SUBSTANTIAL AREA OF RAIN ACROSS THE REGION. ONCE THE SECOND WAVE CLEARS...DRIER AIR WILL MOVE IN FROM THE NW...AND TEMPERATURES WILL BEGIN TO RISE INTO THE WEEKEND.

&&

.AVIATION...

140300Z...COASTS/VALLEYS...AREAS OF LOW CLOUDS WITH BASES 1500-2000 FT MSL AND TOPS 2500-3000 FT MSL AFTER 09Z...HOWEVER...THE TIMING REMAINS UNCERTAIN. LOW CLOUDS WILL SPREAD INTO THE INLAND VALLEYS THROUGH THE DAY ON MON...WITH BASES LIFTING TO AROUND 3000 FT MSL AND TOPS LIFTING TO AROUND 4000 FT MSL. THE LOWER COASTAL SLOPES OF THE MOUNTAINS WILL BE OBSCURED AT TIMES.

MOUNTAINS/DESERTS...EXPECT PORTIONS OF THE LOWER COASTAL SLOPES OF THE MTNS WILL BE OBSCURED IN CLOUDS/FOG EARLY MONDAY MORNING.
OTHERWISE FEW-SCT CLOUDS AOA 15000 FT MSL WITH UNRESTRICTED
VISIBILITY.

&&

.MARINE...

800 PM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

&&

.HYDROLOGY...CONSIDERABLE UNCERTAINTY REMAINS REGARDING TIMING AND AMOUNTS OF PRECIPITATION WE WILL SEE. FOR TIMING...THE MODELS ARE BEGINNING TO COALESCE AROUND THE LATE MONDAY/MONDAY NIGHT...AND TUE NIGHT PERIODS AS TWO WEAK UPPER-LEVEL SHORTWAVES MOVE THROUGH THE DEVELOPING TROUGH OFFSHORE. BASED ON THE DEEP SATURATED LAYER THE MODELS BRING ONSHORE...ANY LIFT WILL RESULT IN SOME RAINFALL. PROBABLY SOME DRIZZLE AND FOG AS WELL DUE TO THE HIGH DEWPOINTS. ALSO...BECAUSE OF THE RAINFALL POTENTIAL OF A MODIFIED TROPICAL AIRMASS...SOME HEAVY AMOUNTS OF RAIN CANNOT BE RULED OUT. IN FACT... OUR LOCAL WRF MODEL HAS SHOWN SOME EXCESSIVE AMOUNTS FROM RUN TO RUN...BUT IN DIFFERENT SPOTS AT DIFFERENT TIMES...HENCE THE UNCERTAINTY WITH THE OPF. THE GREATEST POTENTIAL REMAINS ON THE COASTAL SLOPES WHERE PERIODS OF 20-25 KT WESTERLY...UPSLOPE WINDS SHOULD HAVE NO TROUBLE SQUEEZING OUT MODERATE RAINFALL AT TIMES. GIVEN THE HIGH PW OF THE INCOMING AIR...SLOPES THAT END UP NORMAL TO THE MEAN LOW-LEVEL FLOW WILL HOLD THE GREATEST POTENTIAL FOR THE LARGER AMOUNTS OF RAIN TO ACCUMULATE OVER TIME. TOTAL RAINFALL AMOUNTS OF SEVERAL INCHES WILL BE POSSIBLE LOCALLY ON THESE SLOPES OVER THE ENTIRE EVENT.

BASED ON BLENDS OF THE GUIDANCE AVAILABLE...CURRENT QPF CALLS FOR ONE-HALF TO ONE INCH WEST OF THE MTS...WITH ONE TO TWO INCHES ON THE COASTAL SLOPES.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

949 FXUS66 KSGX 141101 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
401 AM PDT MON SEP 14 2015

## .SYNOPSIS...

MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA AND UPSLOPE FLOW WILL HELP CREATE PERIODS OF RAIN OVER MOST OF THE REGION ALONG AND WEST OF THE MOUNTAINS INTO WEDNESDAY...WITH THE GREATEST COVERAGE OF SHOWERS TONIGHT THROUGH TUESDAY EVENING ALONG AND WEST OF THE MOUNTAINS WITH GREATEST RAINFALL AMOUNTS ON THE COASTAL MOUNTAIN SLOPES. DRYING AND A WARMING TREND WILL FOLLOW INTO NEXT WEEKEND.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

.SHORT TERM (TODAY THROUGH WEDNESDAY)...

MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA WILL ARRIVE
TODAY AND LINGER INTO EARLY WEDNESDAY. THE LOWEST SEVERAL
THOUSAND FEET OF THE ATMOSPHERE WILL BECOME NEARLY SATURATED ALONG
AND WEST OF THE MOUNTAINS FOR TONIGHT THROUGH TUESDAY WITH THE
DEPTH OF THAT MOIST LAYER GRADUALLY DECREASING TUESDAY NIGHT AND
EARLY WEDNESDAY.

A FEW LIGHT SHOWERS ARE POSSIBLE THIS MORNING WITH SLIGHT GREATER CHANCES FOR THE AFTERNOON. WITH A DEEP SATURATED LAYER IN PLACE IN THE LOWER TO MID LEVELS AND INCREASED ONSHORE FLOW IN COMBINATION WITH A WEAK SHORTWAVE FOR THIS EVENING...SHOWERS ARE EXPECTED TO INCREASE THIS EVENING WITH GREATEST RAINFALL TONIGHT ALONG THE COASTAL MOUNTAIN SLOPES.

A SECOND SHORTWAVE FROM THE NORTHWEST COULD INCREASE THE COVERAGE AND AMOUNTS OF THE RAINFALL SOMEWHAT FOR TUESDAY INTO TUESDAY EVENING WITH GREATEST RAINFALL AMOUNTS REMAINING ON THE COASTAL MOUNTAIN SLOPES.

AS THE DEPTH OF THE SATURATED LAYER GRADUALLY DECREASES TUESDAY NIGHT INTO WEDNESDAY...RAINFALL COVERAGE AND AMOUNTS ARE EXPECTED TO GRADUALLY DECREASE. A FEW LIGHT SHOWERS COULD LINGER NEAR THE MOUNTAINS INTO WEDNESDAY AFTERNOON.

RAINFALL AMOUNTS THROUGH WEDNESDAY ARE EXPECTED TO RANGE FROM AROUND ONE HALF INCH NEAR THE COAST TO 1 TO 2 INCHES ON THE COASTAL MOUNTAIN SLOPES WITH ONE QUARTER INCH OR LESS IN THE UPPER DESERTS.

WITH CLOUD COVER AND STRONGER ONSHORE FLOW...HIGH TEMPERATURES ARE EXPECTED TO COOL INTO WEDNESDAY FOR INLAND AREAS. WITH SEA SURFACE TEMPERATURES IN THE UPPER 70S NEAR THE SAN DIEGO COUNTY COAST...LOW TEMPERATURES NEAR THE COAST ARE EXPECTED TO REMAIN ABOVE AVERAGE.

THE STRONGER ONSHORE FLOW WILL BRING GUSTY WEST WINDS IN THE MOUNTAINS AND DESERTS INTO WEDNESDAY.

&&

.LONG TERM (THURSDAY THROUGH SUNDAY)...

THE TROUGH OF LOW PRESSURE NEAR THE WEST COAST WILL WEAKEN THROUGH THE WEEKEND WITH A SLOW INLAND WARMING TREND FOR THURSDAY THROUGH SUNDAY. DRY WEATHER IS EXPECTED WITH AREAS OF NIGHT AND MORNING LOW CLOUDS AND PATCHY FOG FOR COASTAL AREAS.

&&

.AVIATION...

140900Z...AREAS OF LOW CLOUDS WITH BASES 1500-2000 FEET MSL AND TOPS 2500-3000 FEET WILL GRADUALLY INCREASE DURING THE MORNING. TIMING FOR EXACT COVERAGE ON COASTAL AIRPORTS IS VERY UNCERTAIN. LOW CLOUDS WILL SPREAD INTO THE INLAND VALLEYS THROUGH THE DAY...WITH BASES LIFTING TO AROUND 3000 FEET MSL AND TOPS RISING TO AROUND 6000 FEET. THERE IS ALSO AN INCREASING CHANCE OF SHOWERS COINCIDING WITH THE INCREASE IN CLOUDS. SOME OF THE COASTAL SLOPES OF THE MOUNTAINS WILL BE OBSCURED AT TIMES DURING THE AFTERNOON THROUGH THE NIGHT. IN THE HIGHER MOUNTAINS AND DESERTS...MOSTLY CLEAR SKIES WILL PREVAIL TODAY...WITH INCREASING CLOUDS AOA 10000 FEET MSL TONIGHT.

&&

.MARINE...

200 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

**Appendix A - Supplemental** 

802

FXUS65 KPSR 141153 AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
453 AM MST MON SEP 14 2015

.UPDATE...UPDATED AVIATION AND FIRE WEATHER DISCUSSIONS.

&&

#### .SYNOPSIS...

SEVERAL PACIFIC WEATHER DISTURBANCES WILL MOVE THROUGH AND NORTH OF THE REGION THE FIRST HALF OF THIS WEEK KEEPING STORM CHANCES GOING...MAINLY EAST OF THE LOWER COLORADO RIVER VALLEY. BY THURSDAY...DRIER AND STABLE AIR TAKES OVER. TEMPERATURES WILL DROP SEVERAL DEGREES BELOW NORMAL BEFORE WARMING A FEW DEGREES DURING THE LATTER HALF OF THE WEEK.

&&

#### .DISCUSSION...

WHILE THE UPPER LEVELS TRY TO POINT TO A RETURN TO OUR TYPICAL WESTERLY PATTERN ALOFT...THE LOWER LEVEL FLOW AND MOISTURE SURFACE STILL HAS A DECENT MONSOON SIGNAL. AND TO THAT POINT AND AS A GENTLE REMINDER...THE MONSOON SEASON LASTS THROUGH SEPT 30. TYPICAL MONSOON SUNDAY EVENING AGAIN IN TERMS OF THE LOWER LEVELS AROUND THE SOUTH-CENTRAL AZ DESERTS...WITH SEVERAL OUTFLOW INTRUSIONS AND COLLISIONS TO HELP STORM ACTIVITY POP ACROSS NEARLY ALL CORNERS OF THE PHOENIX METRO, LOWEST LEVEL COMPOSITE RADAR CUT...HALF DEGREE...OVERNIGHT TRACKED AN ELONGATED AND LONG-LIVED WESTWARD MOVING OUTFLOW BOUNDARY THAT HELPED PERSIST ACTIVITY ACROSS WESTERN MARICOPA COUNTY AND EVEN SUPPORT SOME ISOLATED SHOWER COVERAGE ACROSS LA PAZ. CONDITIONS AT AND WEST OF THE CO RIVER VALLEY HOWEVER ARE SLIGHTLY DRIER AND UNFAVORABLE FOR MUCH BY WAY OF STORM DEVELOPMENT. FOR THE REST OF THE MORNING...MEAN FLOW ALOFT WILL CONTINUE TO CLEAR EARLY AM THUNDERSHOWERS AND DEBRIS CLOUDS TO THE EAST...WITH MOSTLY CLEAR SKIES HOLDING FOR SOUTHEAST CA AND FAR WESTERN AZ.

FROM A SYNOPTIC SET-UP THE PATTERN REMAINS MOSTLY THE SAME TODAY AS YESTERDAY WITH TROUGHING OFF TO OUR NORTHWEST...EMBEDDED SHORTWAVE/VORT MAXES SKIRTING THE FLOW AND STILL AMPLE LL MOISTURE WITH SFC DEWPOINTS HOLDING IN THE 50S TO 60S AND MIXING RATIOS STILL PUSHING 8-10 G/KG VALUES. OBVIOUS DIFFERENCE WOULD BE THE STABILIZED AND COOLED BOUNDARY LAYER AFTER TONIGHT'S CONVECTION OVER THE SOUTH-CENTRAL AZ DESERTS. ENSEMBLE AND GROUPING OF INDIVIDUAL HI-RES MODELS SUPPORT AT LEAST SLIGHT CHANCE POPS FROM LA PAZ/YUMA COUNTIES EASTWARD AS SOUTHWEST ML WINDS...700-500MB LAYER...INCREASE THROUGH THE DAY AND STILL HAVE PLENTY OF MOISTURE TO WORK WITH THROUGH THE EARLY EVENING. DETERMINISTIC AND SREF MOISTURE FIELDS DO POINT TO A DRY POCKET BEING DRAWN UP FROM THE DRIER EAST PACIFIC ALONG WITH THE ENHANCING SOUTHWEST WINDS THAT PRESENTS AT THE CO RIVER VALLEY AND TRANSITIONS EASTWARD ACROSS AZ AROUND 00Z...PROGGED SOMEWHERE ACROSS WESTERN MARICOPA COUNTY. MIXING RATIOS DROP IN RESPONSE AND CONCEPTUALLY COULD SHUNT THE BEST AREA FOR STORMS INTO THE EASTERN PORTIONS OF THE CWA...POSSIBLY PINAL AND GILA COUNTIES. IN ADDITION...PASSING UL SHORTWAVE ALONG THE NORTHERN FRINGE OF THE STATE WILL ARRIVE JUST OFF-SET OF THE SLIGHT EASTWARD MOISTURE TRANSITION...SO POPS IN THE EVENING DROP OFF FROM PHOENIX WESTWARD. ALONG WITH THE ENHANCING SHEAR PROFILE WITH THE INCREASED ML WINDS...LOCALLY BREEZY TO PERIODICALLY GUSTY WINDS ARE POSSIBLE ACROSS SOUTHEAST CA AND PORTIONS OF WESTERN AZ...WITH GUSTS PEAKING NEAR 30MPH AT TIMES. LOWERED HEIGHTS ALOFT AND THE RAIN COOLED OR OUTFLOW COOLED AIRMASS WILL SUPPORT SLIGHTLY COOLER TEMPERATURES TODAY THAN THOSE FROM YESTERDAY AND RIGHT AROUND SEASONAL NORMALS.

DETERMINISTIC MODEL CAPE GENERALLY CLEARS OUT OF THE AREA BY LATE TUESDAY...WITH THE BUFR SOUNDINGS STILL HOLDING SOME SUB 100 J/KG PERIODS WHERE SOME LINGERING LOW LEVEL MOISTURE REMAINS. A SUCCESSION OF SHORTWAVES...ALBEIT EACH ONE MORE PROGRESSIVELY WEAKER AND FURTHER REMOVED TO THE NORTH...PASSES ACROSS NORTHERN AZ...DRAWING THE BEST LOCALES FOR POPS ALONG THE NORTHERN MARICOPA COUNTY BORDER AND SOUTHERN GILA COUNTY TUESDAY AND WEDNESDAY. LL MOISTURE VALUES WILL MORE NOTICEABLY BE DRAWN DOWN WEDNESDAY...WITH MIXING RATIOS DRYING WEST TO EAST AND DOWN INTO SUB 5 G/KG READINGS AND PWATS ACROSS SOUTH-CENTRAL AZ DROPPING BELOW AN INCH. SOME LOCALLY BREEZY CONDITIONS WILL PERSIST FOR THE WESTERN CWA...WHILE TEMPERATURE CWA-WIDE SETTLE OUT MOSTLY AROUND SEASONAL NORMALS.

# THURSDAY SAPTEMBER 144 KEEP 15 Exceptional Event, Imperial County

FLOW ALOFT WILL GENERALLY MAINTAIN SOME WESTERLY INFLUENCE AS TROUGHING REMAINS OVER THE NORTHERN TIER OF THE COUNTRY AND THE OCCASIONAL SHORTWAVE DIGS DEEPER INTO THE GREAT BASIN. SKIES WILL REMAIN MOSTLY CLEAR WITH MILD AND PLEASANT MID-SEPTEMBER TEMPERATURES. MEDIUM RANGE MODELS POINT TO AN WESTWARD EXPANSION OF THE UPPER RIDGE BACK ACROSS OLD MEXICO AND A REINTRODUCTION OF DEEPER MONSOONAL FLOW AND RELATED MOISTURE BACK INTO OUR AREA FROM THE SOUTH LATE SATURDAY...POSSIBLY SUNDAY. INCREASING CLOUD COVER AND COOLER TEMPERATURES COULD RESULT...AND PRECIP CHANCES COULD RETURN TO AT LEAST FOR THE HIGHER TERRAIN.

#### ጴጴ

#### .AVIATION...

SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...
ISOLATED THUNDERSTORMS ARE EXPECTED TO DEVELOP ACROSS THE PHOENIX
METRO AREA THIS AFTERNOON. EXACT LOCATION OF CONVECTION IS STILL
UNCERTAIN AND WILL ACCOUNT FOR THIS WITH A VCTS AT ALL PHOENIX
TERMINALS. ANY STORMS THAT DO DEVELOP WILL LIKELY MOVE THROUGH
QUICKLY BUT WILL HAVE THE POTENTIAL TO PRODUCE BRIEF HEAVY RAIN.
OTHERWISE...BREEZY SOUTHWESTERLY WINDS ARE EXPECTED LATE THIS
AFTERNOON AND THIS EVENING WITH GUSTS AS HIGH AS 20 KT.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...

MAINLY CLEAR SKIES EXPECTED. MAIN AVIATION WEATHER IMPACT WILL BE AN INCREASE IN WIND THIS AFTERNOON. GUSTS TO 30 KT ARE POSSIBLE AT KIPL...SOMEWHAT WEAKER AT KBLH. WINDS WILL SUBSIDE AFTER 06Z TUESDAY.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

#### &&

## .FIRE WEATHER...

WEDNESDAY THROUGH SUNDAY...

BREEZY CONDITIONS ARE EXPECTED WEDNESDAY AS A LOW PRESSURE SYSTEM MOVES THROUGH THE INTERMOUNTAIN WEST. THEREAFTER...A DRYING TREND WILL TAKE PLACE THROUGH MUCH OF THE WEEK AS A SOUTHWESTERLY FLOW PREDOMINATES ACROSS REGION. RAIN CHANCES WILL RETURN LATE IN THE WEEKEND OR EARLY NEXT WEEK AS THE MONSOON HIGH MIGRATES INTO MEXICO...PULLING SOME MOISTURE NORTHWARD INTO ARIZONA. TEMPERATURES WILL ALSO REMAIN SLIGHTLY BELOW NORMAL THROUGH THE PERIOD.

## &&

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ACCORDING TO STANDARD PROCEDURES.

## &&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

CA...NONE.

&& \$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...NOLTE
AVIATION...HIRSCH
FIRE WEATHER...HIRSCH



College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln Ames, IA 50011

025 FXUS66 KSGX 141616 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
ISSUED BY NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA
915 AM PDT MON SEP 14 2015

## .SYNOPSIS...

MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA AND UPSLOPE FLOW WILL HELP CREATE PERIODS OF RAIN OVER MOST OF THE REGION ALONG AND WEST OF THE MOUNTAINS INTO WEDNESDAY...WITH THE GREATEST COVERAGE OF SHOWERS TONIGHT THROUGH TUESDAY EVENING ALONG AND WEST OF THE MOUNTAINS WITH GREATEST RAINFALL AMOUNTS ON THE COASTAL MOUNTAIN SLOPES. DRYING AND A WARMING TREND WILL FOLLOW INTO NEXT WEEKEND.

## &&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

## .SHORT TERM (TODAY THROUGH WEDNESDAY)...

SEE NO REASON FOR CHANGES TO THE CURRENT FORECAST. THE COMBINATION OF INCREASED TROUGHING ON THE WEST COAST AND REMNANTS OF EXHURRICANE LINDA MOISTURE WILL CONTINUE TO INCREASE THE CLOUDS AND BRING A SLIGHT CHANCE OF SHOWERS...MAINLY TO AREAS WEST OF THE MOUNTAINS TODAY. THERE IS A GREATER CHANCE OF SHOWERS TONIGHT AND TUESDAY WEST OF THE MOUNTAINS WITH A SLIGHT CHANCE OF SHOWERS EXTENDING INTO THE DESERT SECTIONS. THE BEST CHANCE OF SHOWERS AND HIGHEST AMOUNTS WILL BE ON THE COASTAL SLOPES OF THE MOUNTAINS.

SURFACE PRESSURE GRADIENTS ARE TRENDING ONSHORE AND ALONG WITH LOWER HEIGHTS THE AREA WILL SEE COOLER HIGH TEMPERATURES TODAY AND TUESDAY. THE STRONGER ONSHORE FLOW WILL ALSO RESULT IN GUSTY AFTERNOON WINDS ESPECIALLY IN THE MOUNTAIN AND DESERT LOCATIONS.

## ...FROM PREVIOUS DISCUSSION...

A SECOND SHORTWAVE FROM THE NORTHWEST COULD INCREASE THE COVERAGE AND AMOUNTS OF THE RAINFALL SOMEWHAT FOR TUESDAY INTO TUESDAY EVENING WITH GREATEST RAINFALL AMOUNTS REMAINING ON THE COASTAL MOUNTAIN SLOPES.

AS THE DEPTH OF THE SATURATED LAYER GRADUALLY DECREASES TUESDAY NIGHT INTO WEDNESDAY...RAINFALL COVERAGE AND AMOUNTS ARE EXPECTED TO GRADUALLY DECREASE. A FEW LIGHT SHOWERS COULD LINGER NEAR THE MOUNTAINS INTO WEDNESDAY AFTERNOON.

RAINFALL AMOUNTS THROUGH WEDNESDAY ARE EXPECTED TO RANGE FROM

COASTAL MOUNTAIN SLOPES WITH ONE QUARTER INCH OR LESS IN THE UPPER DESERTS.

WITH CLOUD COVER AND STRONGER ONSHORE FLOW...HIGH TEMPERATURES ARE EXPECTED TO COOL INTO WEDNESDAY FOR INLAND AREAS. WITH SEA SURFACE TEMPERATURES IN THE UPPER 70S NEAR THE SAN DIEGO COUNTY COAST...LOW TEMPERATURES NEAR THE COAST ARE EXPECTED TO REMAIN ABOVE AVERAGE.

THE STRONGER ONSHORE FLOW WILL BRING GUSTY WEST WINDS IN THE MOUNTAINS AND DESERTS INTO WEDNESDAY.

&&

.LONG TERM (THURSDAY THROUGH SUNDAY)...

THE TROUGH OF LOW PRESSURE NEAR THE WEST COAST WILL WEAKEN THROUGH THE WEEKEND WITH A SLOW INLAND WARMING TREND FOR THURSDAY THROUGH SUNDAY. DRY WEATHER IS EXPECTED WITH AREAS OF NIGHT AND MORNING LOW CLOUDS AND PATCHY FOG FOR COASTAL AREAS.

&&

.AVIATION...

140900Z...AREAS OF LOW CLOUDS WITH BASES 1500-2000 FEET MSL AND TOPS 2500-3000 FEET WILL GRADUALLY INCREASE DURING THE MORNING. TIMING FOR EXACT COVERAGE ON COASTAL AIRPORTS IS VERY UNCERTAIN. LOW CLOUDS WILL SPREAD INTO THE INLAND VALLEYS THROUGH THE DAY...WITH BASES LIFTING TO AROUND 3000 FEET MSL AND TOPS RISING TO AROUND 6000 FEET. THERE IS ALSO AN INCREASING CHANCE OF SHOWERS COINCIDING WITH THE INCREASE IN CLOUDS. SOME OF THE COASTAL SLOPES OF THE MOUNTAINS WILL BE OBSCURED AT TIMES DURING THE AFTERNOON THROUGH THE NIGHT. IN THE HIGHER MOUNTAINS AND DESERTS...MOSTLY CLEAR SKIES WILL PREVAIL TODAY...WITH INCREASING CLOUDS AOA 10000 FEET MSL TONIGHT.

&&

.MARINE...

200 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

268 WWUS76 KSGX 141948 NPWSGX

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE SAN DIEGO CA 1248 PM PDT MON SEP 14 2015

...STRONG AND GUSTY WINDS IN THE DESERTS TODAY...

.STRENGTHENING ONSHORE FLOW WILL CREATE STRONG AND GUSTY WINDS IN THE DESERTS THIS AFTERNOON AND THIS EVENING. WINDS WILL WEAKEN BY EARLY TOMORROW MORNING.

CAZ061-062-065-150400-/O.NEW.KSGX.WI.Y.0024.150914T1948Z-150915T1000Z/ COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-SAN GORGONIO PASS NEAR BANNING-1248 PM PDT MON SEP 14 2015

...WIND ADVISORY IN EFFECT UNTIL 3 AM PDT TUESDAY...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A WIND ADVISORY...WHICH IS IN EFFECT UNTIL 3 AM PDT TUESDAY.

- \* WINDS...WEST TO NORTHWEST 20 TO 30 MPH WITH GUSTS TO 50 MPH AND LOCAL GUSTS TO 60 MPH.
- \* TIMING...WINDS INCREASING THIS AFTERNOON...PEAKING THIS EVENING...AND LOWERING AFTER MIDNIGHT.
- \* LOCATION...THE DESERT SLOPES AND WIND PRONE ADJACENT DESERT AREAS OF RIVERSIDE AND SAN DIEGO COUNTIES. INTERSTATES 10 AND 8 WILL BE IMPACTED WITH STRONG WINDS.
- \* VISIBILITY...LOCALLY 1 MILE OR LESS IN BLOWING DUST AND SAND.
- \* IMPACTS...STRONG WINDS WILL RESULT IN HAZARDOUS DRIVING CONDITIONS...ESPECIALLY FOR HIGH PROFILE VEHICLES. WATCH FOR BROKEN TREE LIMBS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH PROFILE VEHICLES. USE EXTRA CAUTION.

&&

\$\$

CAZ060-150400-

September 14, 2015 Exceptional Event, Imperial County /0.NEW.KSGX.WI.Y.0024.150914T1948Z-150915T0400Z/ APPLE AND LUCERNE VALLEYS1248 PM PDT MON SEP 14 2015

...WIND ADVISORY IN EFFECT UNTIL 9 PM PDT THIS EVENING...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A WIND ADVISORY...WHICH IS IN EFFECT UNTIL 9 PM PDT THIS EVENING.

- \* WINDS...SOUTHWEST TO WEST WINDS 15 TO 25 MPH WITH GUSTS TO 45 MPH.
- \* TIMING...WINDS INCREASING EARLY THIS AFTERNOON...PEAKING IN THE LATE AFTERNOON...AND LOWERING IN THE EVENING.
- \* LOCATION...THE HIGH DESERTS...INCLUDING APPLE AND LUCERNE VALLEYS. INTERSTATE 15 WILL BE IMPACTED.
- \* VISIBILITY...LOCALLY 1 MILE OR LESS IN BLOWING DUST AND SAND.
- \* IMPACTS...STRONG WINDS WILL RESULT IN HAZARDOUS DRIVING CONDITIONS...ESPECIALLY FOR HIGH PROFILE VEHICLES. WATCH FOR BROKEN TREE LIMBS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH PROFILE VEHICLES. USE EXTRA CAUTION.

&&

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**HARRISON** 



College of Ag

Department of Agronomy

# **Department of Agronomy**

716 Farm House Ln Ames, IA 50011

927 FXUS66 KSGX 142035 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
135 PM PDT MON SEP 14 2015

## .SYNOPSIS...

A TROUGH ALONG THE WEST COAST WILL BRING MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA INTO THE REGION THIS EVENING THROUGH WEDNESDAY...BRINGING RAIN TO AREAS OVER AND WEST OF THE MOUNTAINS TONIGHT THROUGH WEDNESDAY MORNING. SHOWERS WILL LIKELY DIMINISH BY WEDNESDAY NIGHT. STRONG ONSHORE FLOW WILL CREATE GUSTY SOUTHWEST TO WEST WINDS TO THE DESERTS THROUGH LATE TONIGHT. WARMING WILL TAKE PLACE THURSDAY THROUGH SUNDAY AS HIGH PRESSURE BUILDS ALOFT. THE NIGHT AND MORNING MARINE LAYER STRATUS WILL OCCUR MAINLY FOR THE COASTAL AREAS.

## &&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

AFTERNOON VISIBLE SATELLITE IMAGERY SHOWS THAT MARINE LAYER CLOUDS ARE STUBBORN TO CLEAR IN MANY COASTAL AND VALLEY AREAS...LIKELY DUE TO THE STRENGTHENING ONSHORE FLOW AND INCOMING SHORTWAVE TROUGH. WITH THE STRONGER ONSHORE FLOW AND DEEPER MARINE LAYER...COOLING HAS CONTINUED ACROSS THE AREA TODAY...WITH MANY LOCATIONS 10 DEGREES LOWER THAN AT THIS TIME YESTERDAY.

FOR LATE TODAY INTO LATE WEDNESDAY...REMNANT MOISTURE FROM FORMER HURRICANE LINDA WILL GET ADVECTED INTO SOUTHERN CALIFORNIA BY A TROUGH MOVING IN ALONG THE WEST COAST. GFS AND NAM INDICATE PRECIPITABLE WATER INCREASING TO 1.6 TO 1.7 INCHES AS THE MOISTURE MOVES INTO THE REGION. THIS IS QUITE MOIST. MODELS INDICATE THE MOIST LAYER EXTENDING FROM THE SURFACE UP THROUGH 700 MB...WHICH IS FAIRLY DEEP. MODELS ALSO SHOW THAT THE MAJORITY OF RAINFALL ACTIVITY WILL OCCUR DURING THE LATE THIS EVENING THROUGH TUESDAY AFTERNOON PERIOD...WHICH IS WHEN THE MAJORITY OF THE MOISTURE MOVES THROUGH THE AREA. THERE IS NOT MUCH DYNAMICS INVOLVED TO AMPLIFY THE RAINFALL ACTIVITY...OTHER THAN THE SHORT-WAVE THAT MOVES THROUGH THE REGION TONIGHT.

RIGHT NOW THE FORECAST GENERALLY HAS TOTAL RAINFALL AMOUNTS OF 0.50 TO 1 INCH IN THE COAST AND VALLEYS...1 TO 1.75 INCHES IN THE MOUNTAINS...0.05 TO 0.40 INCHES IN THE HIGH DESERTS...AND A TRACE TO 0.10 INCHES IN THE LOWER DESERTS. SOUTHWEST TO WEST 850 MB WINDS OF 10-20 KT SHOULD RESULT IN EFFICIENT RAINFALL ALONG THE COASTAL SLOPES...WHICH IS WHERE THE HIGHEST AMOUNT OF RAIN CAN BE EXPECTED. ALSO...THE HI-RES MODELS...INCLUDING THE CANSAC WRF...NAM 4 AND

LOCAL WRF...ALL SEEM TO FOCUS THE HIGHEST RATN AMOUNTS IN SAN DIEGO Appendix A - Supplemental

COUNTY...SO THE QPF HAS BEEN BUMPED UP BY ABOUT 0.30 TO 0.50 INCHES IN WESTERN SAN DIEGO COUNTY. THESE HI-RES MODELS ALSO SHOW BANDED PRECIP WITH SOME BULLSEYES OF HIGHER RAINFALL...SO THIS LOOKS LIKE IT WILL BE ONE OF THOSE SCENARIOS WHERE SOME LOCATIONS IN SAN DIEGO COUNTY WILL RECEIEVE A FAIR AMOUNT OF RAIN...WHILE OTHERS MAY SEE SIGNIFICANTLY LESS. IF THE HI-RES MODELS ARE CORRECT...ORANGE COUNTY MAY BE ON THE SHORT-END IN TERMS OF GETTING SUBSTANTIAL RAINFALL.

IN TERMS OF INSTABILITY...LOOKING AT THE WRF BUFKIT SOUNDINGS...THERE APPEARS TO BE SOME SURFACE BASED CAPE AROUND 100-300 J/KG TUESDAY MORNING AND AFTERNOON. THE ECMWF AND GFS ALSO SHOW SOME SMALL CAPE DURING THIS PERIOD AS WELL. THIS MAY BE ENOUGH TO SET OFF A LIGHTNING STRIKE OR TWO.

TEMPERATURES WILL LOWER A BIT TODAY AND FURTHER TOMORROW AND WEDNESDAY...DOWN TO 5 TO 10 DEGREES BELOW NORMAL FOR MOST INLAND AREAS. HOWEVER...AREAS NEAR THE COAST MAY STAY A LITTLE ABOVE NORMAL DUE TO THE INFLUENCE FROM THE ANOMALOUSLY WARM WATERS OFF THE COAST.

THE ONSHORE FLOW WILL ALSO CONTINUE TO INCREASE...RESULTING IN GUSTY SOUTHWEST TO WEST WINDS ALONG THE DESERT SLOPES...THROUGH THE PASSES AND CANYONS...AND INTO ADJACENT DESERT AREAS. GUSTS OF 45 TO 55 MPH WILL BE POSSIBLE FOR THESE AREAS...AND A WIND ADVISORY HAS BEEN ISSUED. STRONGEST WINDS WILL OCCUR LATE THIS AFTERNOON AND EVENING.

SLOW WARMING IS EXPECTED THURSDAY THROUGH THE WEEKEND AS THE TROUGH WEAKENS AND MOVES INLAND AND A RIDGE TO THE SOUTHEAST NUDGES INTO THE AREA. EXPECT NIGHT AND MORNING MARINE LAYER STRATUS MAINLY ALONG THE COAST.

&&

.AVIATION...

142000Z...LOW CLOUDS ARE GENERALLY IN THE 2000 - 3500 FEET ABOVE MSL WITH TOPS GENERALLY 4000 TO 6000 FEET ABOVE MSL AND THIS WILL CONTINUE INTO TUESDAY. STARTING AROUND 150000Z SCATTERED SHOWERS WILL BEGIN IMPACTING COASTAL AIRPORTS AND ON APPROACH...WITH THE SHOWERS MAKING IT TO THE MORE INLAND AIRPORTS TO THE MOUNTAINS SLOPES BY 150400Z. SOME OF THE COASTAL SLOPES OF THE MOUNTAINS WILL BE OBSCURED AT TIMES DURING THE AFTERNOON THROUGH TONIGHT. THE SHOWERS AND CLOUDS IN THE 2000 - 3500 FEET ABOVE MSL WILL CONTINUE THROUGH TUESDAY 160000Z...THEN TAPER OFF WITH SLOW CLEARING OVERNIGHT.

HIGH DESERTS AND COACHELLA VALLEY... A FEW HIGH CLOUDS ARE EXPECTED...AT OR ABOVE 10000 FEET ABOVE MSL WITH UNRESTRICTED VISIBILITIES. GUSTY WINDS AT TIMES WILL BE THE ONLY CONCERN.

&&

.MARINE...

100 PM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...WIND ADVISORY UNTIL 3 AM PDT TUESDAY FOR COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-SAN GORGONIO PASS NEAR BANNING.

WIND ADVISORY UNTIL 9 PM PDT THIS EVENING FOR APPLE AND LUCERNE VALLEYS.

PZ...NONE.

&&

\$\$

PUBLIC...HARRISON
AVIATION/MARINE...PIERCE

# IOWA STATE UNIVERSITY

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# **Department of Agronomy**

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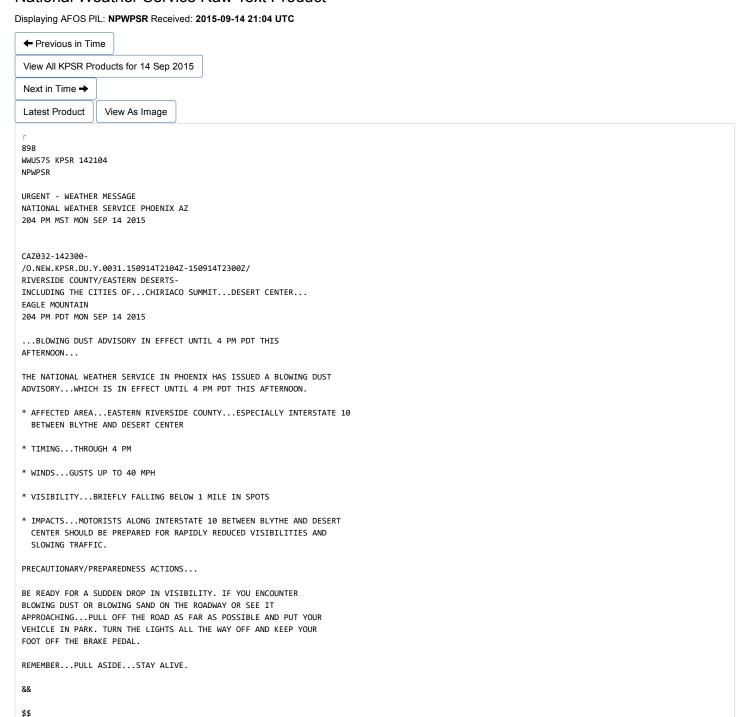


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# National Weather Service Raw Text Product



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563 EXUSES KE

FXUS65 KPSR 142226 AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
326 PM MST MON SEP 14 2015

#### .SYNOPSIS...

PACIFIC WEATHER DISTURBANCES MOVING THROUGH THE WESTERN STATES WILL KEEP STORM CHANCES GOING THROUGH TUESDAY...TRENDING DOWN WEDNESDAY. DRY AIR OVERSPREADS THE REGION BY THURSDAY. TEMPERATURES WILL DROP SEVERAL DEGREES BELOW NORMAL BEFORE WARMING A FEW DEGREES DURING THE LATTER HALF OF THE WEEK.

#### &&

#### .DISCUSSION...

REST OF TODAY AND TONIGHT...

CAPE TURNED OUT TO BE QUITE A BIT FURTHER WEST THAN PREVIOUSLY THOUGHT AS STORM DEVELOPMENT HAS TAKEN PLACE EARLY THIS AFTERNOON OVER PORTIONS OF IMPERIAL AND EASTERN RIVERSIDE COUNTIES. AS OF THIS WRITING...EARLY STAGE STORM DEVELOPMENT HAS BEGUN OVER WESTERN MARICOPA COUNTY. VISIBLE SATELLITE IMAGERY SUGGESTS DRY ADVECTION MAY BE UNDERWAY OVER SOUTHERN YUMA AND SOUTHEAST IMPERIAL COUNTY. DURING THE REST OF TODAY INTO THIS EVENING THE MODELS INDICATE THAT TREND CONTINUING NORTH AND EASTWARD. THIS SHOULD HELP KEEP STORM ACTIVITY OVER SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA ISOLATED...BUT STRONG...IN NATURE. OF NOTE...ONLY THE PAST 2-3 RUNS OF THE HRRR HAVE BEEN DEPICTING OPF OVER SOUTHEAST CALIFORNIA. MEANWHILE...MOST OF SOUTH- CENTRAL ARIZONA RETAINS DEEP MOISTURE THROUGH THE EVENING. ANTICIPATE AT LEAST ISOLATED STORM DEVELOPMENT OVER WESTERN MARICOPA AND NORTHERN PINAL COUNTIES. WITH SOUTHWESTERLY STEERING FLOW OF 25-30 KNOTS THESE STORMS WILL ADVECT NORTHEASTWARD QUITE POSSIBLY AFFECTING PORTIONS OF METRO PHOENIX. STORMS THAT MANAGE TO FORM WILL BE LINGER LIVED BUT LESS LIKELY TO PRODUCE STRONG DOWNDRAFTS THAN STORMS FROM YESTERDAY. HI- RES MODELS HAVE INDICATED ONLY ISOLATED ACTIVITY AT BEST THIS AFTERNOON AND EVENING. PRECIP CHANCES CONTINUE OVERNIGHT OVER SOUTH- CENTRAL ARIZONA AS A WEAKENING SHORT WAVE/VORT MAX MOVES ACROSS...THOUGH MOISTURE WILL NOT BE AS GOOD AND BOUNDARY LAYERS SHOULD BE MORE STABLE.

## TUESDAY THROUGH THURSDAY...

ON TUESDAY ANOTHER WAVE MOVES THROUGH SOUTHERN CALIFORNIA AND THE GREAT BASIN...BRUSHING OUR FORECAST AREA. OUR CWA REMAINS ON THE ANTICYCLONIC SIDE OF THE JET AXIS FOR THE MOST PART. ACCORDINGLY NOT MUCH IN THE WAY OF DYNAMICAL ASSISTANCE FOR PRECIP PRODUCTION...THOUGH THERE MAY BE SOME SPOTTY UPPER DIVERGENCE. ALSO...THE TEMPERATURES ALOFT WILL STILL BE FAIRLY WARM. SO MODEL CAPE IS FAIRLY UNDER-WHELMING BUT ENOUGH MOISTURE LINGERS FOR AT LEAST A SLIGHT CHANCE OF PRECIP. IN FACT...THERE WILL BE SOME MOISTURE REPLENISHMENT AS SOME LOWER LEVEL MOISTURE FROM THE EAST PACIFIC IS ADVECTED IN. IN FACT SOME MODELS DEPICT OPF OVER SOUTHEAST CALIFORNIA DESPITE THE SHALLOW NATURE OF IT...SATURATED LAYERS BARELY REACHING THE FREEZING LEVEL...AND NO CAPE. YET ANOTHER WAVE COMES THROUGH ON WEDNESDAY BUT IT IS EVEN A LITTLE BIT FURTHER REMOVED FROM OUR AREA AND THERE LOOKS TO BE LESS MOISTURE TO WORK WITH, SO POPS TREND DOWN FURTHER WITH ONLY A SMALL PORTION OF THE FORECAST AREA WITH SLIGHT CHANCE POPS. POPS GO AWAY ALTOGETHER THURSDAY AS DRY ADVECTION OVERSPREADS THE FORECAST AREA. WITH TROUGHING OVER THE WESTERN STATES...TEMPS WILL BE NICELY BELOW NORMAL BUT FAR FROM CHILLY.

FRIDAY INTO THE COMING WEEKEND... FLOW ALOFT WILL GENERALLY MAINTAIN SOME WESTERLY INFLUENCE AS TROUGHING REMAINS OVER THE NORTHERN TIER OF THE COUNTRY AND THE OCCASIONAL SHORTWAVE DIGS DEEPER INTO THE GREAT BASIN. SKIES WILL REMAIN MOSTLY CLEAR WITH MILD AND PLEASANT MID-SEPTEMBER TEMPERATURES. MEDIUM RANGE MODELS POINT TO AN WESTWARD EXPANSION OF THE UPPER RIDGE BACK ACROSS OLD MEXICO AND A REINTRODUCTION OF DEEPER MONSOONAL FLOW AND RELATED MOISTURE BACK INTO OUR AREA FROM THE SOUTH LATE SATURDAY...POSSIBLY SUNDAY. INCREASING CLOUD COVER AND COOLER TEMPERATURES COULD RESULT...AND PRECIP CHANCES COULD RETURN TO AT LEAST FOR THE HIGHER TERRAIN.

## &&

.AVIATION...

SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...
LOWER CONFIDENCE ON THUNDERSTORM FORMATION AND COVERAGE
TODAY...HOWEVER PRIMARY INDICATIONS SUGGEST EARLIER DEVELOPMENT AND

# MUCH BRIESEPHEATS DER 314 SUNDA 15 LEVE CERTIFO VOA! FEVENT AR IMPERIAL COUNTY

THE 00Z TIME FRAME...HOWEVER COVERAGE MAY BE SO ISOLATED THAT IMPACTS ARE VERY FEW. OTHERWISE...SFC WINDS WILL GRADUALLY VEER TO A SWLY DIRECTION...WITH POSSIBLY SOME HIGHER GUSTS LATE IN THE AFTERNOON, MODELS ALSO HINT AT LOWER CLOUD DECKS AROUND 5K FT TUESDAY MORNING...THOUGH HAVE ONLY INCLUDED A SCT MENTION IN THIS TAF PACKAGE.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND

PRIMARY AVIATION IMPACT WILL BE AN INCREASE IN SFC WINDS LATE THIS AFTERNOON AND EVENING. SOUTHERLY WINDS WILL PREVAIL AT KBLH WITH A FEW GUSTS UP TO 25KT...THEN WEAKENING LATER THIS EVENING. CONFIDENCE IS GOOD THAT MUCH STRONGER WESTERLY GUSTS 30-35 KT ARE LIKELY AT KIPL THIS EVENING...GENERALLY SUBSIDING AFTER 06Z TUESDAY. THIS MAY ALSO LOFT BLOWING DUST REDUCING VISIBILITIES INTO THE MVFR CATEGORY.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

.FIRE WEATHER...

THURSDAY THROUGH MONDAY...

VERY TRANQUIL WEATHER CONDITIONS DURING THE END OF THIS WEEK INTO EARLY NEXT WEEK...WITH ONLY SLIGHT CHANCES FOR RAINFALL ARRIVING NEXT MONDAY. DESPITE THE DRY WEATHER...HUMIDITY LEVELS WILL REMAIN SOMEWHAT ELEVATED WITH AFTERNOON READINGS ONLY FALLING INTO A 15 TO 30 PERCENT RANGE. OVERNIGHT RECOVERY WILL BE GOOD TO EXCELLENT. WIND SPEEDS WILL BE VERY MANAGEABLE WITH ONLY MODEST AFTERNOON UPSLOPE GUSTINESS TRENDING FROM A WESTERLY DIRECTION AND LIGHT DRAINAGE WINDS OVERNIGHT.

&&

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ACCORDING TO STANDARD PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

CA...BLOWING DUST ADVISORY UNTIL 4 PM PDT THIS AFTERNOON FOR CAZ032.

&&

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...AJ/NOLTE AVIATION...MO FIRE WEATHER...MO

# **IOWA STATE** UNIVERSITY

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# National Weather Service Raw Text Product

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SPECIAL WEATHER STATEMENT NATIONAL WEATHER SERVICE PHOENIX AZ 449 PM PDT MON SEP 14 2015

CAZ032-150045-RIVERSIDE COUNTY/EASTERN DESERTS CA-449 PM PDT MON SEP 14 2015

...SIGNIFICANT WEATHER ADVISORY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A

SIGNIFICANT WEATHER ADVISORY FOR...
CENTRAL RIVERSIDE COUNTY

UNTIL 545 PM PDT

AT 448 PM PDT...DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM 8 MILES EAST OF DESERT CENTER...MOVING NORTH AT 30 MPH.

WINDS IN EXCESS OF 40 MPH WILL BE POSSIBLE WITH THIS STORM. THE STORM MAY ALSO GENERATE DENSE BLOWING DUST AFFECTING MOTORISTS ON INTERSTATE 10 EAST OF DESERT CENTER...AND POSSIBLY ALONG HIGHWAY 177 NORTH OF DESERT CENTER. SMALL HAIL MAY ALSO BE POSSIBLE.

THIS STORM WILL REMAIN OVER MAINLY RURAL AREAS OF CENTRAL RIVERSIDE COUNTY.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

LOCALLY DENSE BLOWING DUST IS POSSIBLE. IF YOU ENCOUNTER BLOWING DUST WHILE DRIVING...PULL OVER AS FAR OFF THE ROADWAY AS POSSIBLE AND PARK. TURN OFF YOUR HEADLIGHTS AND KEEP YOUR FOOT OFF THE BRAKE.

&&

LAT...LON 3345 11515 3346 11542 3400 11527 3399 11497 TIME...MOT...LOC 2348Z 194DEG 26KT 3374 11525

\$\$

СВ

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375 WWUS76 KSGX 150403 NPWSGX

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE SAN DIEGO CA 903 PM PDT MON SEP 14 2015

...STRONG AND GUSTY WINDS IN THE DESERTS TODAY...

.STRENGTHENING ONSHORE FLOW WILL CREATE STRONG AND GUSTY WINDS IN THE DESERTS THIS AFTERNOON AND THIS EVENING. WINDS WILL WEAKEN BY EARLY TOMORROW MORNING.

CAZ060-150515-

/O.EXP.KSGX.WI.Y.0024.000000T0000Z-150915T0400Z/ APPLE AND LUCERNE VALLEYS-903 PM PDT MON SEP 14 2015

...WIND ADVISORY HAS EXPIRED...

WINDS ARE BELOW ADVISORY CRITERIA.

\$\$

CAZ061-062-065-151000/O.CON.KSGX.WI.Y.0024.000000T0000Z-150915T1000Z/
COACHELLA VALLEY-SAN DIEGO COUNTY DESERTSSAN GORGONIO PASS NEAR BANNING903 PM PDT MON SEP 14 2015

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 3 AM PDT TUESDAY...
- \* WINDS...WEST TO NORTHWEST 20 TO 30 MPH WITH GUSTS TO 50 MPH AND LOCAL GUSTS TO 60 MPH.
- \* TIMING...WINDS PEAKING THIS EVENING...AND LOWERING AFTER MIDNIGHT.
- \* LOCATION...THE DESERT SLOPES AND WIND PRONE ADJACENT DESERT AREAS OF RIVERSIDE AND SAN DIEGO COUNTIES. INTERSTATES 10 AND 8 WILL BE IMPACTED WITH STRONG WINDS.
- \* VISIBILITY...LOCALLY 1 MILE OR LESS IN BLOWING DUST AND SAND.
- \* IMPACTS...STRONG WINDS WILL RESULT IN HAZARDOUS DRIVING CONDITIONS...ESPECIALLY FOR HIGH PROFILE VEHICLES. WATCH FOR BROKEN TREE LIMBS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS

938 FXUS66 KSGX 150429 AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
928 PM PDT MON SEP 14 2015

## .SYNOPSIS...

A TROUGH ALONG THE WEST COAST WILL BRING MOISTURE FROM THE REMNANTS OF FORMER HURRICANE LINDA INTO THE REGION OVERNIGHT...BRINGING PERIODS OF RAIN ALONG AND WEST OF THE MOUNTAINS THROUGH WEDNESDAY MORNING. SHOWERS WILL LIKELY DIMINISH ON WEDNESDAY. STRONG ONSHORE FLOW WILL CREATE GUSTY WESTERLY WINDS ACROSS THE DESERTS THROUGH LATE TONIGHT. WARMING WILL BEGIN THURSDAY AND CONTINUE INTO THE WEEKEND AS HIGH PRESSURE BUILDS ALOFT AND THE MARINE LAYER SHRINKS BACK TOWARD THE COAST.

## &&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

AT 8 PM PDT...RADAR SHOWED SHOWERS MOVING THROUGH THE ISLANDS AND APPROACHING THE ORANGE COUNTY COAST. REMOTE GAGES IN THE SAN BERNARDINO MTS INDICATED SOME LIGHT ACCUMULATIONS THERE AS WELL. OTHERWISE...IT WAS A DRY EVENING. THE 00Z MIRAMAR SOUNDING WAS QUITE STABLE WITH TWO WEAK INVERSIONS...ONE BASED NEAR 6K FT AND ANOTHER NEAR 12K FT. THE MOISTURE IN THE COLUMN CAME IN AT 1.07 INCH. THE SFC PRESSURE GRADIENTS CONTINUED TO ACCELERATE ONSHORE AT 3-4 MBS TO NV...AND 6-7 MBS TO THE LOWER DESERTS AT 6 PM PDT. THIS WAS FUELING WIND GUSTS OF 40 MPH OR MORE THROUGH AND BELOW THE DESERT PASSES.

AT 6 PM PDT...SATELLITE IMAGERY STILL SHOWED A WEAK CIRCULATION IN THE CLOUDS 300 MILES SW OF SAN DIEGO. THE SWIRL (REMNANT OF HURRICANE LINDA) WAS DRIFTING SLOWLY NE...WITH A LARGE ARC OF LOW CLOUDS OVER THE PACIFIC FROM SW THROUGH NORTH OF THE CIRCULATION CENTER. SATELLITE MEASURED TPW IN THIS AREA WAS AROUND 1.77 INCH. THIS AREA OF CLOUDS AND MOISTURE WILL BE DRAWN EASTWARD ACROSS SOCAL THROUGH EARLY WEDNESDAY...INCREASING THE CHANCE OF RAIN LATE TONIGHT THROUGH TUE NIGHT. COOLER CLOUD TOPS IN IR IMAGERY COVERED PORTIONS OF THE CA BIGHT SOUTH OF SAN NICOLAS ISL...CORRESPONDING WITH THE SHOWERS ON RADAR. THESE TOPS WERE -3 TO -4 DEGREES C OR ABOUT 18K FT.

A BROAD LOW PRESSURE TROUGH WILL HOLD ACROSS WESTERN N.A. THROUGH MIDWEEK...FORCING WESTERLY FLOW ALOFT OVER SOCAL AND EVENTUALLY DRIER AIR. IN THE MEANTIME...THIS BLOB OF REMNANT MODIFIED TROPICAL AIR WILL BE WITH US THROUGH EARLY WED AS WEAK DISTURBANCES MOVE THROUGH THE TROUGH...LIFTING THE MOISTURE INTO CLOUDS...AND LIGHT TO OCCASIONALLY MODERATE RAIN. ANY CHANCE OF THUNDERSTORMS LOOKS SLIGHT. FOR THE LATTER HALF OF THE WEEK...THE TROUGH WILL LIFT BACK

TO THE NORTH AND A FLAT RIDGE OF HIGH PRESSURE WILL BUILD OVER THE Appendix A - Supplemental SW...RETURNING WARM AND DRY WEATHER WITH A SHALLOW MARINE LAYER ALONG THE COAST.

GUSTY WESTERLY WINDS ARE BLOWING OVER THE DESERT SLOPES AND THROUGH THE PASSES THIS EVENING. ISOLATED GUSTS OF 40 TO LOCALLY 55 MPH HAVE BEEN RECORDED IN THE WINDIEST SPOTS.

&&

## .AVIATION...

150350Z...COASTS/VALLEYS/MOUNTAINS...MULTIPLE SCT STRATUS LAYERS 1500-5000 FT MSL BECOMING BKN-OVC AFTER 06Z WITH -SHRA DEVELOPING AFTER 08Z. EXPECT CIGS TO MOSTLY BE 2500-3500 FT...LOCALLY DOWN TO 1500 FT MSL WITH 4-6 MI VIS IN SHOWERS. ISOLATED HEAVIER SHOWERS POSSIBLE 10-18Z. SHOWERS BECOMING ISOLATED AND LIGHT BY LATE TUE EVENING. COASTAL SLOPES OF THE MOUNTAINS OBSCURED IN CLOUDS/FOG/RAIN THROUGH TUE NIGHT.

DESERTS...GUSTY SOUTHWEST-WEST WINDS WITH SFC GUSTS 30-45 KT THIS EVENING...WEAKENING OVERNIGHT. WINDS REDEVELOPING TUE AFTERNOON WITH GUSTS 30 TO 40 KT. ISO-SCT LIGHT SHOWERS POSSIBLE AFTER 18Z. OTHERWISE SCT-BKN CLOUDS AOA 8000 FT MSL.

&&

.MARINE...

920 PM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH SATURDAY.

&&

.HYDROLOGY...SHOWERS HAVE BEEN MAKING STEADY PROGRESS OVER THE INNER COASTAL WATERS THIS EVENING...OTHERWISE NO SIGNIFICANT RAINFALL WAS REPORTED THROUGH 8 PM PDT. THERE IS LITTLE CHANGE TO PREVIOUS THINKING REGARDING THE RAINFALL. THE FORECAST AMOUNTS AT LOWER ELEVATIONS ARE HEAVILY WEIGHTED ON THE PW AVAILABLE. FORCING STILL LOOKS WEAK...BUT MODELS STILL INDICATE SOME MODERATE RAINFALL AMOUNTS BEFORE ALL IS SAID AND DONE LATE WED. INSTABILITY DOES NOT LOOK SUFFICIENT FOR THUNDERSTORMS WITH HEAVY DOWNPOURS...SO THE PREVAILING RAINFALL RATES SHOULD BE LIGHT TO OCCASIONALLY MODERATE.

UPSLOPE FLOW ON THE WEST-FACING SLOPES OF THE MTS ARE FAVORED FOR SUSTAINED ACCUMULATIONS AS THE ASCENDING AIR WILL BE EASILY SATURATED. MODELS ARE FORECASTING 850 WINDS FOR THE PERIOD TO BE FROM 10-20 KT. THIS SHOULD NOT SUPPORT EXCESSIVE AMOUNTS OF RAIN. THE ECMWF MODEL SHOWS NEAR SATURATION FROM THE SFC TO 5500 FEET BETWEEN 06Z TUE AND 16Z WED. IF IT IS NOT RAINING...EXPECT SOME FOG AND DRIZZLE THROUGH THIS PERIOD. THE 18Z RUNS OF THE HIRES NAM4 AND WRF SHOW GOOD CONSISTENCY WITH VALUES OF ONE-HALF TO THREE-QUARTERS INCH ALONG THE COAST...RANGING UP TO 1-2 INCHES ON THE HIGHER COASTAL SLOPES.

THIS TYPE OF RAINFALL SHOULD BE VERY BENEFICIAL...SINCE IT WILL

FALL OVER MANY HOURS AND SHOULD HAVE A CHANCE TO SOAK IN...RATHER THAN IMMEDIATELY RUN OFF...MINIMIZING THE FLOOD THREAT...AND LOWERING THE WILDFIRE THREAT FOR A TIME.

&&

.SKYWARN...

SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...WIND ADVISORY UNTIL 3 AM PDT TUESDAY FOR COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-SAN GORGONIO PASS NEAR BANNING.

PZ...NONE.

&&

\$\$

PUBLIC...JAD AVIATION/MARINE...SS

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**Appendix A - Supplemental** 

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WWUS76 KSGX 150933

**NPWSGX** 

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE SAN DIEGO CA 233 AM PDT TUE SEP 15 2015

...WIND ADVISORY FOR THE SAN DIEGO COUNTY DESERTS AND BELOW THE BANNING PASS HAS BEEN CANCELLED.

CAZ061-062-065-151045/O.CAN.KSGX.WI.Y.0024.000000T0000Z-150915T1000Z/
COACHELLA VALLEY-SAN DIEGO COUNTY DESERTSSAN GORGONIO PASS NEAR BANNING233 AM PDT TUE SEP 15 2015

...WIND ADVISORY HAS BEEN CANCELLED...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS CANCELLED THE WIND ADVISORY.

GUST SOUTHWEST TO WEST WINDS HAVE MOSTLY DROPPED BELOW 40 MPH AND ARE EXPECTED TO CONTINUE TO SLOWLY DIMINISH THIS MORNING.

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